ACE-SPED

AFRICA CENTRE OF EXCELLENCE FOR SUSTAINABLE POWER AND ENERGY DEVELOPMENT (ACE-SPED)

UNIVERSITY OF NIGERIA, NSUKKA

ORGANIZES A TWO DAY TRAINING WORKSHOP ON INTELLECTUAL PROPERTY, TECHNOLOGY TRANSFER, AND INNOVATION

OBJECTIVES

- Carry out sensitization campaign aimed at stimulating interest in original research geared towards promoting innovations
- link and match Industries, SMEs, and Private sector players with University Innovators/Inventors for mutually rewarding benefits
- provide adequate assistance and facilitate the process of patents acquisition on products of original research and creative activities emanating from the University
- facilitate the acquisition of other Intellectual property types such as copyright, trademarks and designs
- promote the commercialization of research and development (R&D) results and products in the University
- Serve to midwife a seamless Technology transfer from the ACE-SPED/University/ innovators to suitable development industry partners for mutual economic benefit.

To register for the workshop fill the form:
https://docs.google.com/forms/d/11f5LR5aQol8FpLcWxnIHvbT33ZgphIy3Cab7IIJL7lg/edit

The training is for the first 100 participants to register

HIGHLIGHTS OF THE WORKSHOP INCLUDE

1: Overview of Intellectual Property and Innovation
2: Benchmark Research requirements for Intellectual Property generation
3: Intellectual Property rights and legal issues in Nigeria
4: Role of Institutional Management for Intellectual Property Generation and Exploitation
5: The imperative/role of Intellectual Property Policy and Asset Management in enhancing inventiveness, innovation and wealth
4: The Process of Patenting and Research

OUTPUT COMMERCIALIZATION

Practical Training 1:
Patent Databases and Search Techniques

Practical Training 2:
Drafting of Patent Specification and Claims

Practical Training 3:
Documentation Procedures and Completion of Patent Forms

FACILITATORS/SPEAKERS:

1. NOTAP
2. Prof. Damian C. Odimegwu, Director, IPTTO, University of Nigeria, Nsukka
3. Dr. Mrs. Queeneth A. Kingsley-Omoyibo, IPTTO, Igbinedion University, Okada
4. Dr. Okechukwu Timothy Umahi, Dept. of Private Law, Faculty of Law, UNEC
5. Prof. Gabriel Okafor, Dept. of Food Science and Technology, University of Nigeria, Nsukka

Date: 28th -29th Feb., 2024
Time: 9am – 3pm each day

Venue:
CAD room LNG Building, Faculty of Engineering, University of Nigeria Nsukka

Further details contact:+2349056989857

Benchmark Research Requirements For Intellectual Property Generation

By

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Dept. of Food Science and Technology,
University of Nigeria, Nsukka

Paper Presented at
Training Workshop on Intellectual Property and Research Commercialization on 28th February, 2024
@ Faculty of Engineering, University of Nigeria, Nsukka.


BENCHMARKS
15
30

INTRODUCTION

Benchmark

“Taking a measurement against a reference point” (U.S. Geological Survey benchmarking symbol).

“A process of industrial research enabling managers to perform company-to-company comparisons of processes and practices to identify the "**best of the best**" and attain a **level of superiority or competitive advantage**”(Camp, 1989).

BENCHMARKING DOES NOT:

- **Copy, but adapts the information to fit ones needs, culture, and system.**
- **Steal. It is an open, honest, legal study of another organization's business practices.**
- **Stop. It is a continuous process that requires recalibration.**

BENCHMARKING also means

The **search for industry best practices** that lead to superior performances. (Defense for Command, Control, Communication, and Intelligence, 1994).

The practice of **being humble enough to admit that someone else is better at something and being wise enough to learn how to match and even surpass** them at it. (American Productivity and Quality Center, 1993).

BENCHMARKING REQUIRES:

- a good knowledge of firm's business processes prior to attempting any comparisons.
- planning to identify the best-in-class for comparison and data collection.
- analysis to determine the performance gaps.
- integration to set new goals and standards.
- an action plan to implement the changes to the process.
- constant updating to keep the standard of excellence.
- a means to measure.
- commitment by leadership.
- resources, including time.

RESEARCH

Systematic investigative process employed to increase or revise current knowledge by discovering new facts.

Two general categories:

(1) **Basic research** - aims at increasing scientific knowledge, and

(2) **Applied research** - uses basic research for solving problems or developing new processes, products, or techniques (Anon, 2018).

INNOVATION RESEARCH

Involves looking for solutions – either to known, or sometimes to undefined needs.

Innovation research is not innovative research (i.e. new or novel methods to actually conduct research, study behaviors, etc.).

Curiosity and hope of reward spur innovation.

INNOVATION

Innovation is essentially a problem-generating (finding unmet needs) and problem-solving (generating solutions) process (Sutton, 2018).

- Invention and Innovation driven researches fuels Intellectual Property Rights.

INTELLECTUAL PROPERTY (IP)

Intellectual property (IP) - describes several distinct types of intangible assets such as patents, copyrights, trademarks, and trade secrets (Voss, *et al*, 2017).

- ***IP protection allows a rights holder to exclude others from interfering with or using the property right in specified ways.***

BASIC STRUCTURES FOR IP GENERATION

- Continuous Staff orientation and creation of IP awareness .
- Creation of institutional IP policies.
- Provision of state of the art research laboratories and facilities
- Adequate support for academics to innovate and invent (funding, promotion, mouth watering sharing ratio);
- Increased national R&D funding for universities and research organizations by government.

BASIC STRUCTURES Contd…

- Full implementation of the National Policy on Science, Technology & Innovation
- Promotion of innovation and patenting culture.
- Availability and utilization of patent information for innovation.
- Production of patent alert on new patent applications /invention activities
- IP training and education.
- Popularising STI through regular technology fairs, exhibitions, S&T clubs and the mass media (films, newspapers, radio, Tv, etc.)

BASIC STRUCTURES Contd…

- Enhanced linkages between researchers and end user;
- Strong researchers and industry linkages,
- Efficient means of dissemination of research results,
- Enhanced commercialization of research results
- Capacity and capability building of researchers.
- Research Collaboration
- Efficient Research Administration

RESEARCH REQUIREMENTS FOR IP GENERATION

Our R&D engagements should:

- enhance new business development.
- encourage employment generation,
- create wealth through the establishment of SMEs, to introduce goods and services in the marketplace.

(National Policy on Science, Technology and Innovation, 2011) .

INNOVATION driven RESEARCH????

Hunters approach

- Tracks
- Trap
- Harvest
- Commercialization
- Benefits

OF INNOVATION

- Meeting a Need /Gap
- Technology Improvement
- Upgrading Local Technologies
- Optimization

SUCCESSFUL INNOVATION

"Creation and adoption of new ideas that make a positive impact."

RESEARCH REQUIREMENTS

1. A good Research Group

- multidisciplinary,
- focused,
- passionate about innovation
- disciplined/committed
- industrious
- critical/fast thinkers & analytical mind
- Curious
- Systematic – attention to details etc.

2. Good understanding of the research problem

- **Define the research problem** very clearly to think about the solutions better and faster.
- Idea generation/brainstorming
- Use design thinking
- Be alert.

Ideate/brainstorm

- Brainstorm in small groups with the best creative thinkers, experts & non-experts.
- Constraints -free environment.
- Capture all ideas no matter how silly.

- Evaluate or critique ideas after brainstorming.

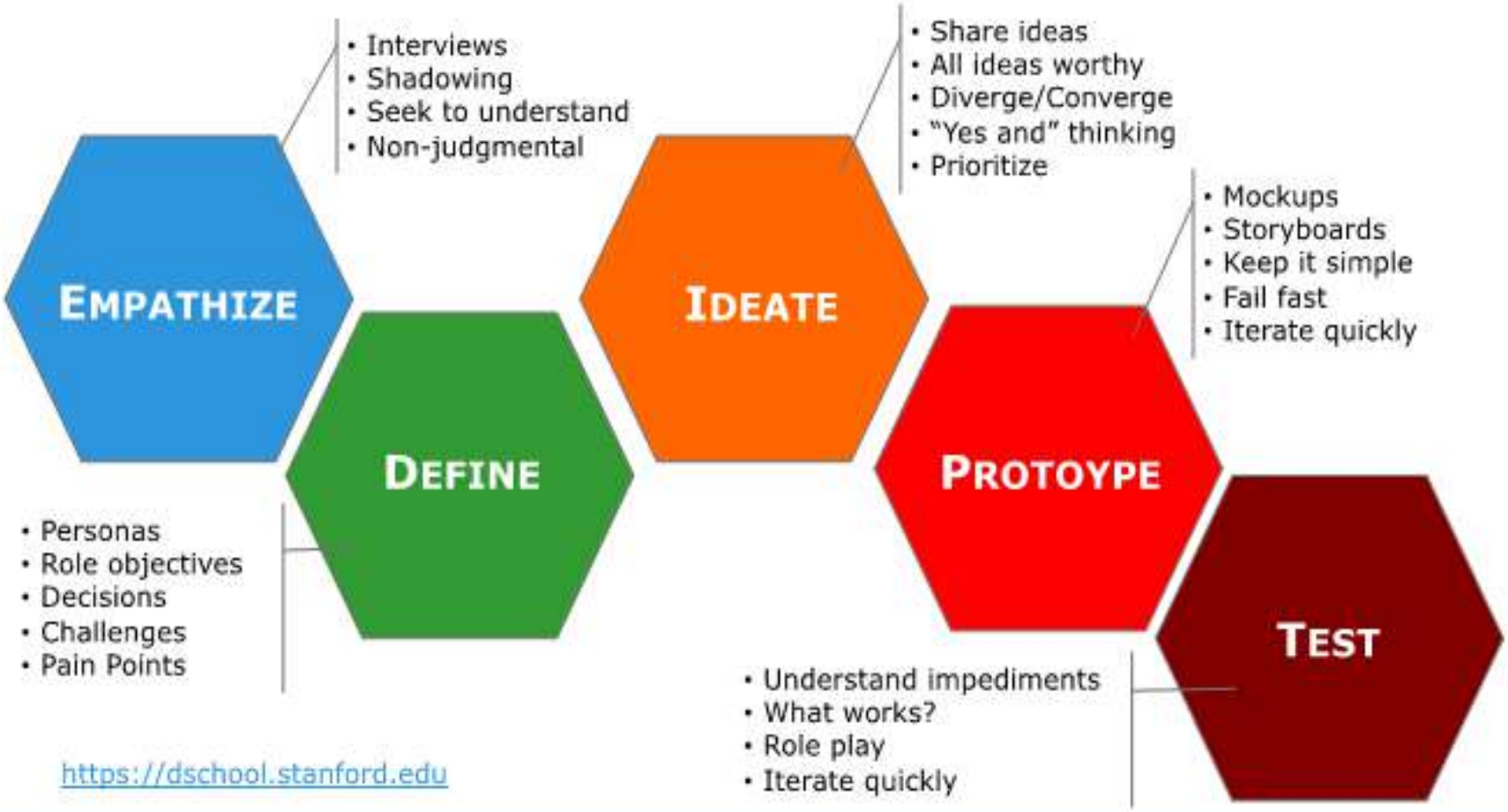
Adopt a Design Thinking Approach

*Uses the **designer's sensibility and methods to match people's needs with what is technologically feasible** and what a **viable business strategy can convert into customer value and market opportunity** (Brown,2008).*

Its **methodology** has three phases originally:

- inspiration,
- ideation and
- implementation

Stanford d.school Design Thinking Process



https://dschool.stanford.edu

3. BE FOCUSED- Are You Inventing or Innovating?

"Invention" - creation of a product or introduction of a process for the first time.

"Innovation," - occurs if someone improves on or makes a significant contribution to an existing product, process or service (Grasty, 2012).

Invention is like a pebble tossed in the pond, **Innovation** is the rippling effect that pebble causes.

- The **Inventor** tossed the pebble.
- The **Innovator** knows that the ripple will eventually become a wave. i.e *Microprocessor & evolving products. Ride-sharing startups, Uber and Lyft.*

4. Conduct a Literature Search.

- Once the research problem is identified, a literature search should be conducted before proceeding to design the experiment.
- Search patent databases, Journals, and books for studies already performed, the designs, the instruments used, the procedures, and the findings.

Guides the researcher and helps them to create a project that extends or complements existing research.

5. Construct a hypothesis/Design the Research

- State the **research question as a hypothesis** (Your predictions about what your research will find). This provides the basis for all other decisions in the process and therefore, it is a critical step.

- **Determine the design of the research** Hypothesis ought to be reviewed/probed to ascertain that an experimental design is the appropriate research design needed to answer the question.

6. Determine the Research Methods

- Identification and planning of the details necessary to conduct the research (identifying the test subjects, materials/materials of construction, data collection instruments (sensors, probes, etc), methods, and procedures for the experimental stage).

7. Conduct the Research and Test the Hypothesis

- The experimental procedures will be executed
- Essential replications
- Prototype development
- Performance evaluation/ relevant analyses

8. Data analyses, Report writing and Conclusion

- Evaluation of experimental research data
- Data processing
- Review the data and determine if it confirms or disproves the hypothesis.
- Filling of patent application
- Publication of results

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INTELLECTUAL PROPERTY POLICY AND ASSET MANAGEMENT

BY

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FEBRUARY 28, 2024

Outline

1) INTELLECTUAL PROPERTY RIGHTS POLICY
2) OBJECTIVES OF IP POLICY
3) MATTERS TO BE ADDRESSED IN UNIVERSITY IPR POLICIES
4) STAKEHOLDERS
5) HIGHLIGHTED ISSUES
6) INCOME DISTRIBUTION
7) INTELLECTUAL PROPERTY ASSET MANAGEMENT
8) LACK OF PROPER IP POLICY AND ASSETS MANAGEMENT
7) CONCLUSION

INTELLECTUAL PROPERTY RIGHTS POLICY

What is it?

It is an institutional strategy/guidelines on the management of generated IPRs within the institution. One of the questions most researchers always ask is "who owns a patent or rights to an invention?"

a. the researcher.
b. the University/research institute.
c. both researcher and research institution (jointly owned).

The right option from (a-c) above depends on an institutional IPR policy which varies from an institution to another.

OBJECTIVES OF IP POLICY

- Creation of an environment that encourages and expedites the dissemination of discoveries, creations and new knowledge generated by researchers for the greatest public benefit,

- Protection of the traditional rights of scholars to control the products of their scholarly work,

- Ensuring that the commercial results, financial or other, are distributed in a fair and equitable manner that recognizes the contributions of the inventors and the institution as well as those of any other stakeholders,

- Establishment of standards for determining the rights and obligations of a university or R&D institution, the creators of intellectual property and their sponsors, with respect to inventions, discoveries and works created at the institution,

- Encouragement of assistance to and the provision of mutually beneficial rewards for a university or R&D institution and its members who transfer intellectual property to the public through commercialization and licensing,

- Ensuring compliance with applicable laws and regulations and enabling a university or R&D institution to secure sponsored research funding at all levels of research, and

- Ensuring that institutions are aware of the different Intellectual Property (IP) systems in place in the countries where the acquisition of IP rights is sought.

MATTERS TO BE ADDRESSED IN UNIVERSITY IPR POLICIES

1. There is need to formulate and adopt comprehensive intellectual property policies backed up by an institutional framework of rules and guidelines as well as an organisational structure that is effective in co-ordination and facilitation of intellectual property development and protection.

2. One of the objectives of an intellectual property policy would be to provide guidance to the staff and student body as well as third parties with respect to intellectual property. Matters that require to be addressed by such a policy include, *inter alia*, the nature of intellectual property, its ownership, exploitation and the specific procedures adopted within that particular university for research as well as intellectual property. Another crucial aspect is that of dispute resolution mechanism.

Nature of Intellectual Property

Universities need to define intellectual property broadly and their policies need to be comprehensive in their coverage and holistic in their approach. It should cover any copyrightable or patentable matter. The often-mentioned requirement for patentability for an invention is that it must be new or novel and inventive step and being capable of industrial application. That means that the nature of intellectual property should include:

- Patents
- Copyright in literary works (including computer programmes), dramatic works, musical works, artistic works, films, sound recordings, broadcasts, published editions and certain types of performances.
- Trade and service marks
- Designs
- Trade Secrets and other confidential materials

However, some universities have some reservations with trade secrets protection arguing that it does not augur well with openness in knowledge sharing, which is part of the academic mission.

Ownership of Intellectual Property

It is a reality today that most of the intellectual property rights are often not held by the inventive individuals. Corporations, government agencies or cultural institutions hold the bulk of these rights. Today universities are among institutions that hold intellectual property rights. In most of policies universities assert ownership of intellectual property created by academic and non-academic staff as a result of their employment by a university. This is even more where the invention or discovery is a result of a research which has been funded by the university or other public or donor sources. The issue of ownership becomes a bit complex in situations where the funding is either partially or wholly comes from external sources. In such situations it is desirable that a shared proprietorship and a formula for sharing of intellectual property right ownership be devised to deal with cases of that nature. An aspect relevant to mention here is the disclosure clause requiring members of staff.

The issue of ownership of intellectual property is not only confined to university staff. It extends also to students and this goes beyond copyright as the tradition has been and extends to other types of intellectual property. Some universities assert ownership of intellectual property created by students where the funding has been provided by or obtained by the university and where they had required substantial use of university resources. There are universities which claim ownership of intellectual property created by students where it has resulted from the use of pre-existing intellectual property owned by the university. What is relevant here is that the policies in the aspect of ownership of intellectual property cover staff both academic and non-academic and students. Students contribute a lot in university research activities that lead to inventions and innovations, especially postgraduate students in all faculties ranging from natural sciences to engineering as well as fine arts which can be developed and harnessed by the industry when for example it comes to design of products.

Exploitation of Intellectual Property

Many universities have changed their approach to intellectual property and they are now willing to exploit and reap the benefits of their research results. This largely deals with commercialisation of intellectual property and the sharing of benefits which accrues from the exploitation of for example an invention or innovation. Issues of licensing or material transfer contracts are crucial to be considered in the exploitation of intellectual property by universities. Licensing of university inventions has generated controversy and it has attracted protagonists as well as opponents on whether it is desirable for a university to indulge itself in such activity. Normally aspects of sharing of revenue arising out of the exploitation of intellectual property between the university and the member or members of staff who created it are also addressed as part of exploitation of intellectual property.

Institutional Framework

Some university intellectual property policies provide for an institutional framework or arrangement to oversee the implementation of the policy. They are styled differently but essentially, they have almost the same obligations and duties to perform. They are the custodians of policy and regulations on intellectual property in their respective universities. They are responsible for the day to day management and administrative matters relating to intellectual property.

Stakeholders

There are several stakeholders in the process of generation and commercialization of innovations, inventions and R&D results. They include:-

- R&D institutions;
- Researchers, inventors and innovators;
- Research groups and departments;
- Guest researchers;
- Sponsors;
- Technology transfer units;
- Government;
- The public.

HIGHLIGHTED ISSUES

- Nature of Intellectual Property
- Ownership of Intellectual Property
- Disclosure of Intellectual Property
- Right of Ownership of IPR & Income Distribution
- Types of Ownership
- Modes of Marketing/ Commercialization of IP
- Resolution of Disputes
- Revenue Sharing

OWNERSHIP OF INTELLECTUAL PROPERTY

- Can be with
  - Government
  - Institution
  - Creator
- Policy for:
  - Government funded research
  - Copyrighted materials
  - Use of institutional trademarks
  - Staff and student research
  - Consulting work
  - Collaborative research & Visiting Scholars
  - Sponsored research by industry
  - Other sponsored research
  - Rights of IP creator to exploit

STAFF & STUDENT RESEARCH & CONSULTING

- How is IP created by staff handled?
- How is IP created by students handled?
  - Undergraduate students
  - Graduate students
- How is IP created by Professors when doing consulting work handled?

Collaborative Research and Visiting Scholars

- For Collaborative Research:
  - IP ownership if created by company person
  - IP ownership if created by institution person
  - IP ownership if jointly created

- For Visiting Scholars:
  - IP ownership if created only by Visiting Scholars
  - IP ownership if jointly created

LICENSING CHANNELS

- Non-exclusive rights?
- Exclusive rights?
- Outright ownership?
- Share of licensing revenue?

DISCLOSURE OF INTELLECTUAL PROPERTY

- Having incentives for people to disclose their new research results
  - Revenue sharing
  - Source of consulting work
  - Research sponsorship
  - Hiring of graduating students
    - Keep Invention Disclosure Form short and simple
    - Collect detailed information about IP at first meeting with inventor (s); having a cheek-off list is helpful.

MODES OF MARKETING IP PRODUCTS/ASSETS

Universities/R&D institutions can market their IP through the Following:

- Research and Development contracts
- Consultancy contracts
- Joint Research and Development contract
- Joint Pilot Plants and Demonstration projects
- Exploiting IPRs by Licensing contracts
- Scouting for licensees
- Exploiting Non-Protected Results of Research and Development

DISPUTE RESOLUTION

The generation, protection and commercialization of IP involves several entities regarded as stakeholders. Each stakeholders has interests and expectations. These interests and expectations may sometimes clash resulting in disputes. Tertiary and R&D institution should have in place dispute resolution mechanism to resolve disputes when they arise.

INCOME DISTRIBUTION

Every worthwhile IP eventually gets to the market in the form of product or service through the process of commercialization, thereby, generating loyalty. All stakeholders (researchers/inventors) that contribute to the process of the generation and commercialization **(faculty, department, outsourced, etc.,)** of IP ought to obtain financial benefit. The financial benefit encourages and spurs stakeholders for further work. However, all stakeholders do not benefit equally. The distribution of income generated from the commercialization of the IP is shared based on agreed formula in accordance with the contributions of the stakeholders **as defined in the IPR policy.**

REVENUE SHARING

- Who participates in the sharing and how much to each?
  - Creators (C)
  - Their Department and/or School (CD/CS)
  - The Institution (I)
- When are distributions made?
- What happens if creator(s) leave the institution or die?

REVENUE SHARING EXAMPLES

- Stanford: 15% to TLO; then 1/3 to creator(s); 1/3 to creators department; 1/3 to creators School

- Harvard: 1st $50k: 35%C; 30%CD; 20%CS; 15%I Above $50k: 25%C; 40%CD; 20%CS; 15%I

- Yale: 1st $100k: 50%C; 50%I; $100k - $200k: 40%C; 60%I; Over $200k: 30%C; 70%I

INTELLECTUAL PROPERTY ASSET MANAGEMENT

Intellectual Property Rights management relates to the variety of ways in which organisations use their intellectual property assets to improve their competitive position, generate revenue and improve their access to financing. This is possible where good policy is in place.

Intellectual Property Rights management is a systematic and a strategic approach to the management of Intellectual Property Assets by an organisation. In this case, **University of Nigeria, Nsukka.**

Intellectual Property Rights management

"If you don't measure it, you can't manage it“

Good IPR management is the bedrock of commercialization, hence, a well-maintained and well updated inventory of all IP assets helps the organization in making an informed decision for its future planning. Thus, once IP assets are inventoried and all existing IP procedures are documented, the future plans for growth and gains can be aligned in accordance of the business policies and help them to plan a long term goal oriented business strategy.

2.0 STAGES IN THE CONFIGURATION OF IPR MANAGEMENT

2.1 IP Assets Audit: IP audit can be defined as a systematic review of all IP assets owned, used or required by a business in order to uncover under-utilized IP assets, to identify any threats to an organization and to enable business planners to devise informed strategies that will maintain and improve the organizations' market position.

❖To be precise, IP audit helps the organization to do a SWOT analysis. It examines and evaluates the strengths and weaknesses in the procedures used to protect each intangible asset and secure appropriate intellectual property rights.

❖IP audit provides tools to develop additional processes, take corrective measures to help ensure that future intellectual property rights are captured on the following:

i. Completed R&D results
ii. Ongoing R&D
iii. Improvements

❖In a nutshell, an IP audit is the process through which an organization understands the breadth and depth of the intellectual property assets it owns or controls.

2.2 Protection - IPR Registration Process

a. Preparation of Application:

(i) The foremost step for the IPR process is to draft the Patent Specification, (ii) The second step is to fill out the IPR application forms.

b. Filing of Application:

Once application is ready, it is filled at the Patent Office and thus a Patent Application number and filing date are given for the IP.

2.3 Institutional policies: this relates to drafting and negotiating agreements that enable strategic IPR management.

2.4 Development: IPR issues are considered early in the product development process; integrating IPR, technical, and business considerations allows for better understanding of risks and opportunities in commercialization.

2.4.1 Agreements such as: material transfer agreements, collaborative research and development (R&D) agreements, Contracts for outsourcing R&D, manufacturing agreements, distribution agreements, etc.

2.5 Maintenance: Are maintenance fees (annuities) being timely paid? Are products being marked properly? Are trademarks being properly used? Are trade secrets being reasonably protected?

2.6 Exploitation: This involves Commercialization, licensing and enforcement of rights.

- Good IPR management contributes to improve the commercialization system overall, which is measured by the licensing revenue and the number of licensed technologies.

3.0 Intellectual Property and Technology Transfer Office

The weight of expertise in technology transfer office is in marketing the early stage of technologies that may arise from this institute.

The drafting of early-stage licenses and partnership agreements, the choice of partners, etc.

The drafting and negotiation of agreements, and the enforcement.

LACK OF PROPER IP POLICY AND ASSETS MANAGEMENT

The research works are:

- not patented, exploited, licensed
- not commercialised
- not coordinated in an institution
- not linked to industry nor entrepreneurs
- not targeted to major needs, national priorities
- not made visible to potentially interested parties

Conclusion

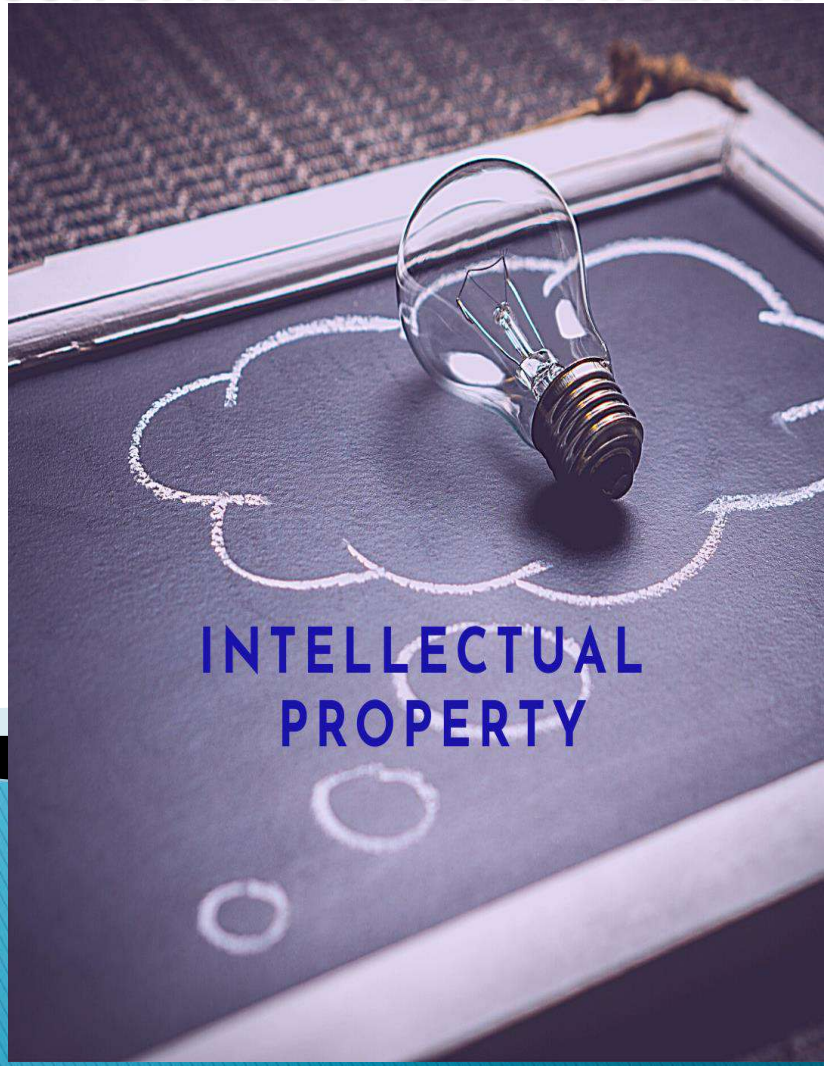
Tertiary and R&D institutions by their mandate and focus create IPs. These IPs require proper management in order to derive the maximum benefit accruable from them. Intellectual Property Policy is that instrument that enables the proper management of institutional IP to determine ownership, resolve disputes and distribute incomes equitably.

THANK U 4 LISTERNING

MANAGEMENT OF INTELLECTUAL PROPERTY TECHNOLOGY TRANSFER OFFICES (IPTTO) IN OUR UNIVERSITIES IN NIGERIA.

NAME OF PRESENTER:
ENGR.DR.MRS.QUEENETH ADESUWA KINGSLEY-OMOYIBO
AFFILIATION: IGBINEDION UNIVERSITY OKADA NIGERIA.

FEBRUARY 2024.



THE ROLE OF INSTITUTIONAL MANAGEMENT OF INTELLECTUAL PROPERTY GENERATION AND INTELLECTUAL PROPERTY EXPLOITATION.

IGBINEDION UNIVERSITY OKADA
EDO STATE, NIGERIA

INTRODUCTION.
IP GENERATION
IP RIGHTS.
YEARS OF PROTECTION
IP EXPLOITATION.

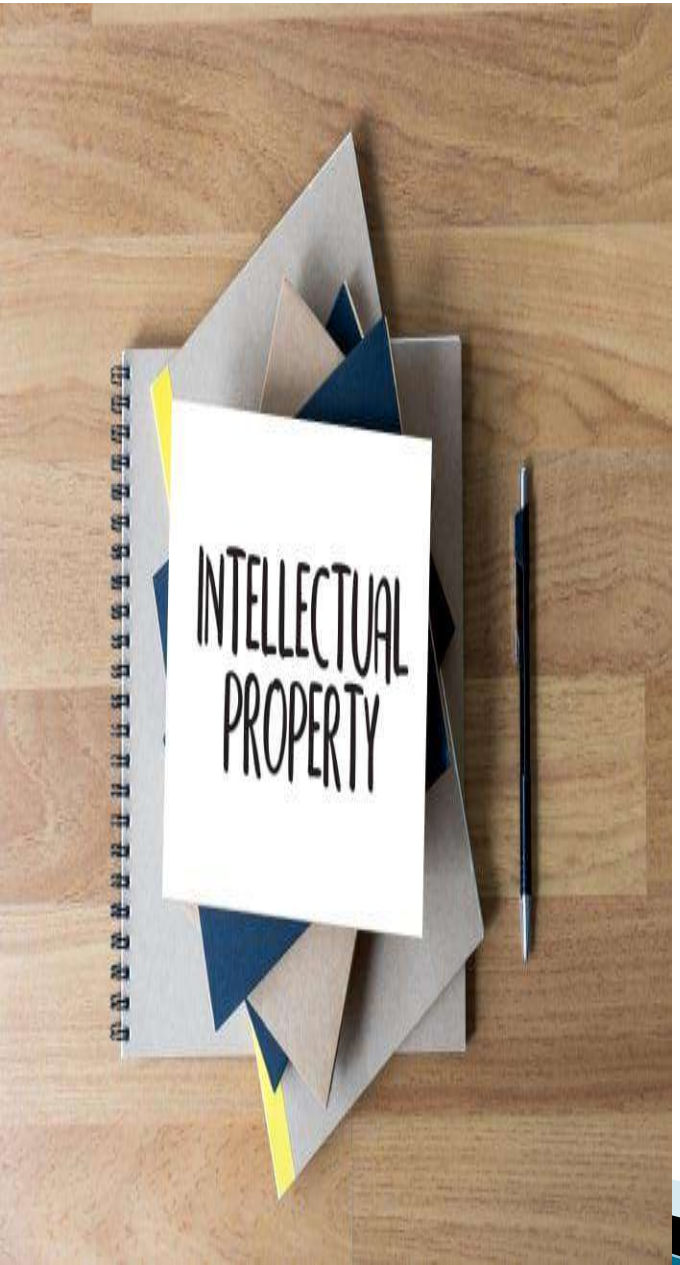
INSTITUTIONAL MANAGEMENT OF IP

OBJECTIVES OF IPTTO

OUTLINE

- FACILITIES OF IPTTO
- MEANING OF IP
- TYPES OF INTELLECTUAL PROPERTY.
- TYPES OF IP
- CREATION S OF INTELLECTUAL PROPERTY.
- MEANING OF TECHNOLOGY TRANSFER.
- WHAT IS INTELLECTUAL PROPERTY TECHNOLOGY TRANSFER OFFICE?.
- WHAT IPTTO DOES.
- COORDINATOR OF IPTTO.
- IPTTO ACTIVITIES.
- ATTRIBUTES OF A GOOD IPTTO.
- HOW CAN WE USE IP?.
- RESPECT OTHERS.
- THANK YOU

INTRODUCTION



- INTELLECTUAL PROPERTY : IDEAS
- **INTELLECTUAL PROPERTY MANAGEMENT**: STRATEGIC HANDLING OF IP ASSETS
- **NOTAP** :NATIONAL OFFICE FOR TECHNOLOGY AQUSITION AND PROMOTIONS ABUJA, NIGERIA.
- ESTABLISHED 65 IPTTOS IN UNIVERSTIES,POLYTECHNICS AND RESEARCH INSTITUTIONS.
- 21 IN NORTHWEST,9 IN SOUTH SOUTH,10 IN SOUTH EAST,12 IN SOUTHWEST,8 IN NORTH CENTRAL, AND 5 IN NORTH EAST.

INTELLECTUAL PROPERTY GENERATION

- IDEAS FROM THE MIND
- INVENTIONS
- LITERARY WORKS
- ARTISTIC WORKS
- DESIGNS
- SYMBOLS

INTELLECTUAL PROPERTY DEVELOPMENT

- TO IDENTIFY INTELLECTUAL PROPERTY RIGHTS
- TO DEVELOP IP RIGHTS
- TO USE IP RIGHTS TO FULL POTENTIAL

INTELLECTUAL PROPERTY ACTS

- ✓ COPYRIGHTS ACT
- ✓ PATENT AND DESIGN ACT
- ✓ TRADEMARK ACT

THESE ACTS GOVERN AND PROTECTS THE IP RIGHTS.

INTELLECTUAL PROPERTY RIGHTS

- LEGAL RIGHTS
- PROTECT INVENTORS AND INNOVATIONS

FOR A CERTAIN TIMING

THEY ARE:

- PATENTS
- COPYRIGHTS
- TRADEMARK
- REGISTERED DESIGNS

YEARS OF PROTECTION

- COPYRIGHTS IS PROTECTED THROUGHOUT THE LIFE OF THE INVENTOR
- PLUS 70 YEARS AFTER DEATH OF AUTHOR
- PATENT: 20 YEARS
- TRADEMARKS: FOREVER(RENEWED EVERY TEN YEARS). A CRUCIAL IP FOR BUSINESS.

INTELLECTUAL PROPERTY EXPLOITATION

- USE IP
- DEVELOP THE IP
- MAKE MONEY FROM IP
- SELL PATENT
- ONE CAN DISPOSE OFF A PATENT

EXPLOITING AN IP

- LICENSING
- BUSINESS START UPS
- JOINT VENTURES
- OUTRIGHT SALES OF PATENTS

INSTITUTIONAL MANAGEMENT OF IP

- A COMPLEX PROCESS
- INVOLVES RESEARCH
- INVOLVES ENTREPRENEURIAL RESULTS
- OBTAINING NEW KNOWLEDGE
- PRODUCING NEW TECHNOLOGIES
- NEW PRODUCTS
- NEW PROCESSES
- SET RULES,SET UP PROCEDURES TO ADDRESS IP MATTERS IN THE INSTITUTION.

OBJECTIVES OF IPTTO

- INTELLECTUAL PROPERTY RESOURCES ARE DEVELOPED AND USED TO FOSTER GROWTH IN THE ECONOMY OF NIGERIA.
- IPTTO HELPS TO ENHANCE COLLABORATION BETWEEN INDUSTRIES,THE ACADEMIA, GOVERNMENT AND SOCIETY
- TRANSFER OF TECHNOLOGY AND KNOWLWDGE IS IMPROVED
- PROTECT INVENTIONS(PATENTS)
- AWARENESS CAMPAIGN

FACILITIES OF IPTTO IN OUR INSTITUTIONS

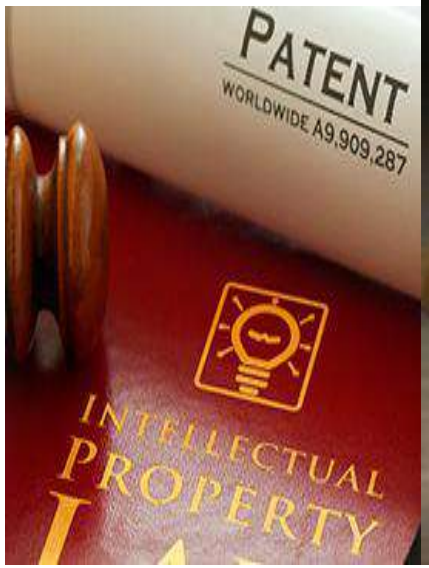
- OFFICE FURNITURES
- DESKTOPS,CPU AND UPS
- ROUTERS
- PRINTERS
- AIR CONDITIONERS, CEILING FANS,A TABLE TOP FRIDGE
- OFFICE CABINETS
- STATIONERIES
- PHOTOCOPIERS
- AND OTHER IMPORTANT FACILITIES

MEANING OF INTELLECTUAL PROPERTY

- IDEAS FROM THE MIND
- IMAGES
- DESIGNS
- INVENTIONS
- LITERARY WORKS
- ARTISTIC WORKS
- SYMBOLS

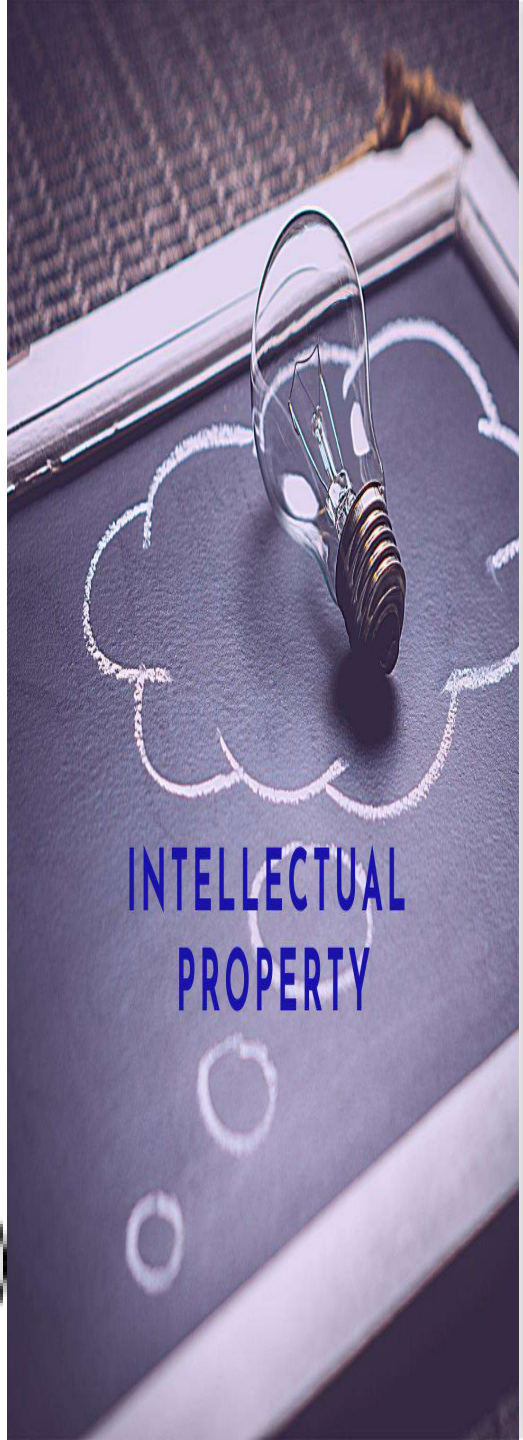
TYPES OF INTELLECTUAL PROPERTY

- INDUSTRIAL PROPERTY
- PATENTS
- TRADE SECRETS
- TRADE MARKS
- INDUSTRIAL DESIGNS
- GEOGRAPHIC INDICATIONS
- SOFTSKILLS
- COPYRIGHTS



TYPES OF IP CONTINUED

- COPYRIGHTS
- MUSIC
- DATABASE
- LAYOUT DESIGNS
- LITERARY WORKS



IGBINEDION UNIVERSITY OKADA
EDO STATE, NIGERIA

INTELLECTUAL PROPERTY CREATIONS

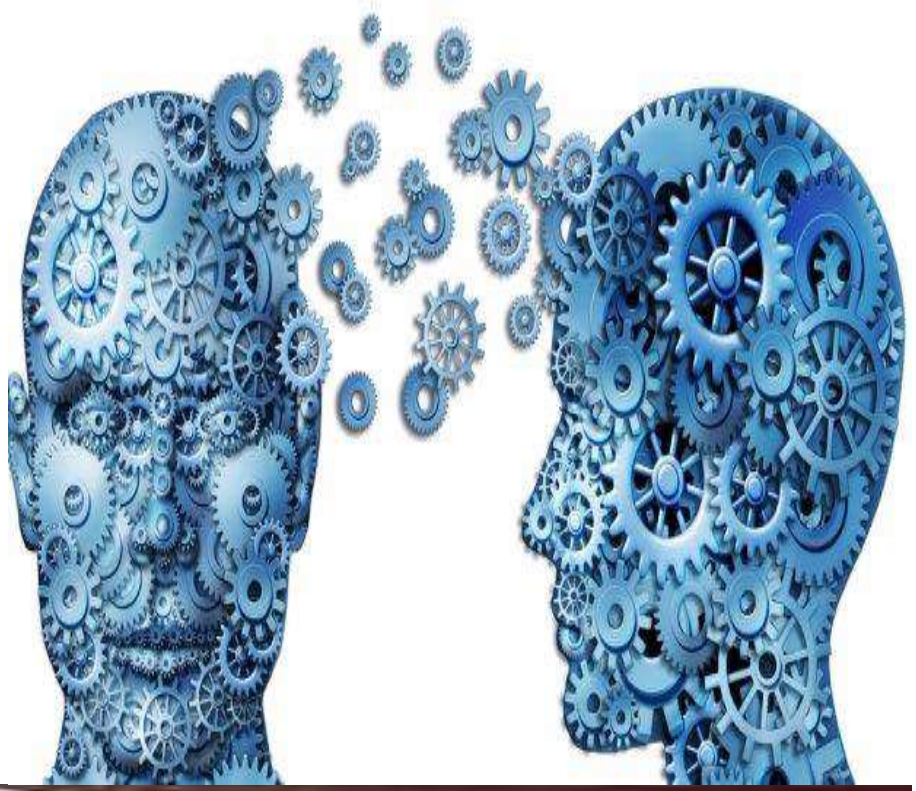
- UNIVERSITY RESEARCH & DEVELOPMENT
- RESEARCH FROM INVENTIONS
- DISCLOSING INVENTIONS & PROTECTING IT
- APPLYING FOR PATENT
- GOING FOR GRANTS FOR PATENTS
- MARKETING/OMNI-CHANNEL LOGISTICS.
- LICENSING

INTELLECTUAL PROPERTY CREATIONS

- COMMERCIALIZATION
- GETTING PROFIT
- CONTINUOUS INVESTMENT IN RESEARCH & DEVELOPMENTBY THE UNIVERSITY.

MEANING OF TECHNOLOGY TRANSFER

- FLOW OF APPLICABLE KNOWLEDGE FROM ONE LOCATION TO ANOTHER
- MANAGEMENT OF SKILLS FROM ONE LOCATION TO ANOTHER.



INTELLECTUAL PROPERTY TECHNOLOGY TRANSFER OFFICES
IPTTO

THESE OFFICES ARE SET UP BY **NOTAP** FOR:

- COLLABORATION WITH INDUSTRIES
- ASSIST INVENTORS
- ASSIST INNOVATORS
- ASSIST ENTREPRENEURS TO PATENT
- CONVERT IDEAS TO ASSETS
- CREATING ECONOMIC VALUE FOR THE NATION NIGERIA.

IPPTOs

- BOOST INNOVATIONS
- PROTECT INNOVATIONS
- TURN INNOVATIONS INTO WEALTH
- CREATE ECONOMIC POWER
- GENERATE INTELLECTUAL CAPITAL
- TRANSFORM INTELLECTUAL PROPERTY TO CAPITAL

WHAT IPTTO OFFICES DO

- TO PATENT INVENTIONS
- REFOCUS ALL R&D PROJECTS
- COORDINATE RESEARCH
- AUDIT RESEARCH(PLAGIARISM TEST).....*****
- MARKET ALL R&D OUTPUTS
- LICENSE,INCUBATE AND COMMERCIALIZE IDEAS
- CREATE SPIN OFFS,START UPS AND SMEs.
- GENERATE ENTREPRENEURIAL THINKING AMONG RESEARCHERS AND STUDENTS

IPTTOS

ALL IPTTOS MUST BE

- WELL FURNISHED
- MUST BE VERY ACTIVE AND FUNCTIONAL
- MUST BE VISIBLE(ONLINE AND OFF LINE)
- CARRY OUT AWARENESS CAMPAIGNS PERIODICALLY.
- RESULT ORIENTED

COORDINATOR OF IPTTO

- MUST NETWORK WITH OTHER UNIVERSITIES
- CARRY OUT REGULAR MEETINGS WITH STAFF AND STUDENTS OF THE UNIVERSITY
- UPDATE THE UNIVERSITY WITH LATEST ON TECHNOLOGY INNOVATIONS
- MUST BE KNOWLEDGEABLE IN PATENT SEARCH AND PATENTS
- FRIENDLY AND CHARISMATIC
- WILLING TO TRAVEL ALWAYS FOR IMPROVEMENT.

COORDINATOR OF IPTTO

- MUST BE A CONFIDENT PERSON
- VERY VASERTILE
- MUST HAVE GOOD RAPPORT WITH INDUSTRIES,

LOCAL GOVERNMENT,

UNIVERSITIES, FINANCE HOUSES,FEDERAL GOVERNMENT AND INTERNATIONAL TOO.

IPTTO ACTIVITIES

- ENCOURAGE INDUSTRIES TO PARTICIPATE
- IPTTO ADMINISTRATORS MUST BE GIVEN INCENTIVES
- CARRY OUT AWARENESS PROGRAMS AND HAVE A RECORD OF ALL ACVTIVITIES FOR KEEPS FOR THE UNIVERSITY AND NOTAP.
- HAVE GOOD PUBLICITY IN THE UNIVERSITY.HAVE A GOOD ,ATTRACTIVE AND EYE CATCHING SIGNBOARD.
- GOOD FUNDING.

ATTRIBUTES OF A GOOD IPTTO

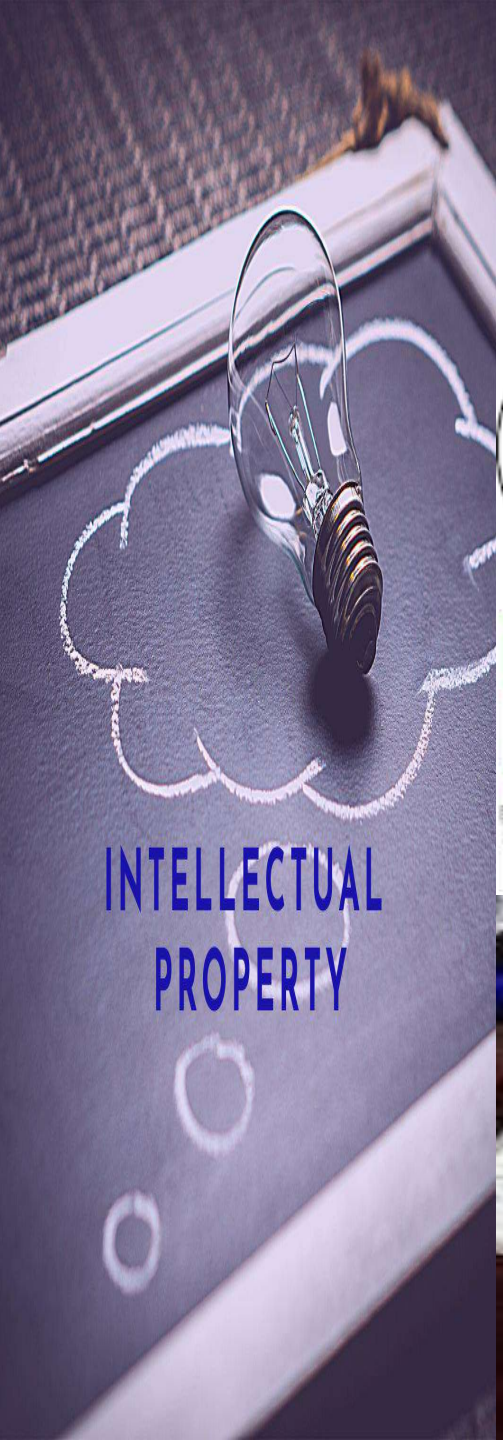
- EVERYONE IN THE UNIVERSITY MUST BE AWARE OF ALL THERE IS ABOUT IPTTO
- THE UNIVERSITY MUST BE IP ENABLED
- PROPAGATE SEMINARS,WORKSHOPS, CONFERENCES,NEWSLETTERS
- TRAIN ON: INTELLECTUAL PROPERTY LAWS
- IP REGULATIONS
- PATENT DRAFTING,COPYRIGHTS,TRADE MARKS AND DESIGNS.

HOW WE CAN USE INTELLECTUAL PROPERTY.

1. CARRY OUT CLEARANCE SEARCH
2. CHECK FOR AVAILABILITY OF DOMAIN NAME
3. REGISTER YOUR BRAND, TRADE MARK AND LOGO
4. IDENTIFY OTHER TYPES OF IP ASSETS YOU MAY POSSESS
5. CONFIDENTIALLY,KEEP YOUR INFORMATION
6. ALWAYS SEEK TO PROTECT YOUR IP THAT IS UN REGISTERED
7. ALWAYS AVOID THE INFRINGEMENT ON PEOPLE RIGHTS.

RESPECT OTHERS INTELLECTUAL PROPERTY.

- NO REPRODUCING
- NO PIRACY
- NO SELLING
- NO COPYING
- GIVE PROPER CREDIT TO OTHERS
- IP …ORIGINAL,NOUVELLE CREATIONS…GENERATE.EXPOIT



THANK YOU FOR LISTENING

- QUESTIONS???

Intellectual property Exploitation intellectual property Generation

- This is the way.

OVERVIEW OF INTELLECTUAL PROPERTY

Presenter:

Professor Damian C. Odimegwu
Director, Intellectual Property and Technology Transfer Office
University of Nigeria, Nsukka

OUTLINE OF PRESENTATION

1. PREAMBLE
2. RESEARCH AND DEVELOPMENT
3. THE ROLE OF INTELLECTUAL PROPERTY IN PROMOTION OF INVENTION AND INNOVATION
4. INTELLECTUAL PROPERTY
5. COMMERCIALIZATION OF INNOVATION
6. CONCLUSION

PREAMBLE

- The role of Research and Development (R&D) in the overall development of a nation cannot be over emphasized

- R&D is noted to be the key driver of Science and Technology (S&T) that propels nations into prosperity and competiveness

- Nigeria's Science, Technology and Innovation System (STI) is evolving with great challenges

- Taking domestic research products/services to the market is simply taking science to the market for societal benefits

- The ultimate destination of R&D should be the commercial launching of the product/service in the market for societal benefits

RESEARCH AND DEVELOPMENT

- Research and development – R&D – is the process by which an entity works to obtain new knowledge that it might use to create new technology, products, services, or systems that it will either use or sell

- The goal most often is to add to the entity's bottom line.

- R&D is key to wealth creation

- Modern transformation of human society is hinged on the process of R&D

RESEARCH AND DEVELOPMENT

Key Location/Sources of Research and Developments:

- Universities
- Polytechnics
- Colleges of Education
- Research Institution
- Technical and Vocational Institutes
- Industrial laboratories
- Informal Settings

Vantage, 2024

RESEARCH AND DEVELOPMENT

- **Process of Research:**

- Research is the systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions

- Outcome of research may include:
  - Knowledge generation
  - Publications
  - Inventions and Innovations

Research Invention

- Something that has never been made before, or the process of creating something that has never been made before.

- An invention is a unique or novel device, method, composition or process. The invention process is a process within an overall engineering and product development process.

- It may be an improvement upon a machine or product or a new process for creating an object or a result. Such works are novel and not obvious to others skilled in the same field.

- Thus, inventions are of three kinds: scientific-technological (e.g in medicine and engineering), sociopolitical (e.g in economics and law), and humanistic, or cultural.

Research Innovation

- Innovation can be defined simply as a "new idea, device or method".

- However, innovation is often also viewed as the application of better solution that meet new requirements, unarticulated needs, or existing market needs.

- Such innovation takes place through the provision of more effective product, processes, services, technologies, or business models that are made available to markets, government and society.

- The term "innovation" can be defined as something original and more effective and, as a consequence, new, that "breaks into" the market or society.

Why Invention and Innovation?

- Scientific inventions and innovation act as the backbone of our society

- Inventions and innovation have revolutionized not only our mode of life but our national and world problem

- Invention and innovation is the heart of technology and without this process there would be no modern life but only a primitive life

- Inventions and innovation generally are needed to solve a plethora of problems in life – medicine, food security, machinery, etc.

- Inventions and innovations are currently the basis of a strong economic benefits to several developed countries of the world.

How do we Promote Invention and Innovation?

Research Issues

(1) More of Applied research –
Uses basic research for solving problems or developing new processes, products, or techniques (Anon, 2018).

(2) Innovation research drive (including using new or novel methods to actually conduct research, study behaviors, etc.).

Pursuit of Intellectual Property

Intellectual property (IP) is a term that describes a number of distinct types of intangible assets such as patents,copyrights, trademarks, and trade secrets

➢ *IP protection allows a rights holder to exclude others from interfering with or using the property right in specified ways.*

THE ROLE OF INTELLECTUAL PROPERTY IN PROMOTION OF INVENTION AND INNOVATION

WHAT IS INTELLECTUAL PROPERTY?

- Intellectual property (IP) refers to creations of the mind, such as inventions; literary and artistic works; designs; and symbols, names and images used in commerce (WIPO, 2024).

Weinstein EP, 2024

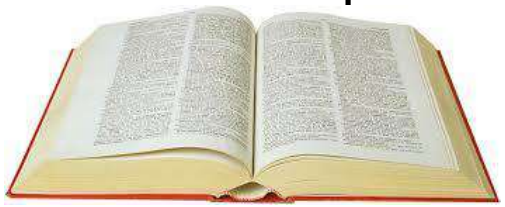
- These creations are subject to statutory protection by virtue of which their creators are conferred with rights in the nature of proprietary interest called intellectual property rights

- The rights allows the creator to use and exploit or control the use and exploitation of the property by any other person

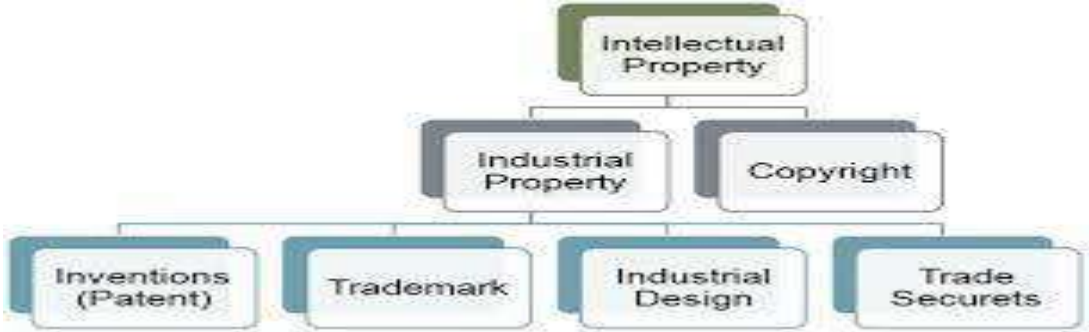
INTELLECTUAL PROPERTY

IP exists in two categories namely:

1. **Copyright** which embraces literary works, musical works, artistic works, cinematograph films, sound recordings and broadcast. Note also that there are rights related to copyright often referred to as neighbouring rights. These includes rights of performers in their performances, rights of producers of phonograms and the rights of broadcasters



2. **Industrial property:** These are works of patents, trademarks, industrial designs, trade secrets and geographical indications



Trademark

TRADEMARK:

- Trademark may be defined as brand name used by manufacturers to identify their products

- A trademark is not descriptive of the product but associates it with its manufacturer

Purpose of Trademark:

- Distinguishing of goods from another
- Quality assurance
- Advertisement function
- Origin or source function
- Guarantees environment of fair trading

Industrial Design

- These are basically the ornamental or aesthetic aspect of a product. Designs add to the attractive qualities of an article thus making them more commercially viable.

- It may consist of combinations of colours or and any three dimensional form whether or not associated with colours is an individual design if it is intended to be used as a model or pattern to be multiplied by industrial process.

- Industrial design are relevant to a wide variety of products of industry from technical and medical instruments to household products, toys furniture and electrical appliances to cars and architectural structures; from textile designs to sport equipment.

- Industrial design is also important in relation to packaging and containers.

Geographical Indications

- Geographical indications and appellations of origin are signs used on goods that have a specific geographical origin and possess qualities, a reputation or characteristics that are essentially attributable to that place of origin.

Bashkir Honey – Russian Federation

Tuchetian Guda - Georgia

Watches Switzerland (Swiss made)

Images: courtesy of WIPO

- Usually, a geographical indication includes the name of the place of origin of the goods. Also, the qualities, characteristics or reputation of the product should be essentially due to the place of origin.

Trade Secrets

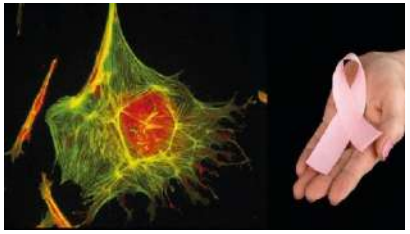
- Trade secrets are IP rights on confidential information (secret formulas, know-how, and other key information) which may be sold or licensed.

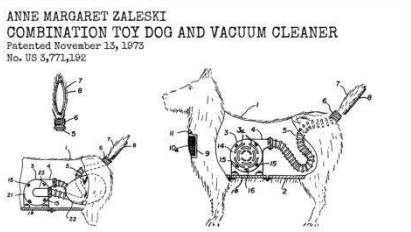
- In general, to qualify as a trade secret, the information must be **commercially valuable,** known only to a **limited group of persons**, and be subject to **reasonable steps taken** by the rightful holder of the information to keep it secret, including the use of confidentiality agreements for business partners and employees (WIPO, 2024).

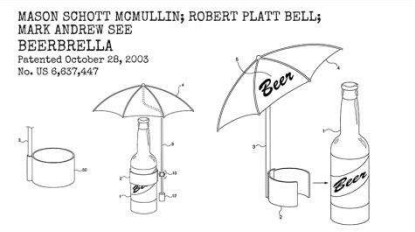
- The unauthorized acquisition, use or disclosure of such secret information in a manner contrary to honest commercial practices by others is regarded as an unfair practice and a violation of the trade secret protection.

Patent

❑ A patent is a form of intellectual property which consists of a set of **exclusive rights granted by a sovereign state to an inventor/researcher** or their assignee *for a limited period of time* in *exchange for the public disclosure of an invention*.







Images: courtesy of WIPO

❑The right to *exclude others* from making, using, offering for sale, or selling the invention into the country or importing the invention into the country.

❑Patent operates to protect a technological development or practical invention that is essentially better in some way than what was made before or for a better way of making it.

Patents

PATENT: TYPES

- **Utility Patent or Patent of Invention**: These patents protect machines, processes, chemical compositions and the other kinds of inventions that are valuable because of their usefulness;

- **Design Patent**: Granted to anyone who invents a new, original, and ornamental design for an article of manufacture;

- **Utility Models or Petty Patents or Utility Innovation Patents:** In practice, protection for utility models is typically sought for innovations of an incremental nature that might not satisfy the criteria for patents of invention, e.g. inability to demonstrate inventive step.

Patent

PATENT AND PATENTABILITY:

- For an invention to be patentable it has to be new and must be the product of an inventive activity and is capable of industrial application or if it constitute an improvement upon a patented invention and is also new, results from an inventive activity and also capable of industrial application

- An invention is deemed to be new if it does not form part of the state of the art in the particular subject of application; and it will be adjudged to result from an inventive activity if it does not follow from the state of the art either as to method, the application, the combination of methods, or the product which it concerns or as to the industrial results it produces

- Presently, most patent terms are set at twenty (20) years from the day of filing the application

Patent

PATENT: WHO GRANTS IT

Patent can also be processed and granted through countries or regions; group of countries over the years created **Regional Patent Office** for filing, search and examination of regional patents.

Examples of these are:-

- ✓Nigerian Trademark, Patent and Design Registry
- ✓African Intellectual Property Organization (OAPI)
- ✓African Regional Intellectual Property Organization (ARIPO)
- ✓Eurasian Patent Organization (EAPO)
- ✓European Patent Organisation (EPO)
- ✓Patent Office of the Cooperation Council for the Arab States of the Gulf (GCC Patent office)
- ✓United States Patents and Trademark Office (USPTO)

Patent

PATENT: NIGERIAN PATENT OFFICES

- ✓ **Trademark, Patent and Design Registry**
  Federal Ministry of Industry, Trade and Investment
  This is the responsible office for patent application processing

- ✓ **National Office for Technology Acquisition and Promotion (NOTAP)**
  Is responsible for Innovation, Patent, and technology Transfer Initiatives

- ✓ **Intellectual Property and Technology Transfer Office (IPTTO)**
  Responsible for Institutional processing of applications in UNN

- ✓ An application for patent in respect of an invention is made to the Registrar of Patent and must be accompanied by the **Claims** and the **Specifications** documents.

COMMERCIALIZATION OF INNOVATION

- Commercialization or commercialisation is the process of introducing a new product or production method into the market.

- Many technologies begin in a research and development laboratory or in an inventor's workshop and may not be practical for commercial use in their infancy (as prototypes).

- The "development" segment of the “research and development” spectrum requires time and money as systems are engineered with a view to making the product or method a paying commercial proposition.

- The product launch of a new product is the final stage of new product development - at this point advertising, sales promotion, and other marketing efforts encourage commercial adoption of the product or method.

Innovation Ecosystem

- **The Place of Technology Incubation Hubs and Science Parks**
  In the **Technology Incubation Hubs** inventions are incubated until they mature into Innovations.

- **Home of Start-ups**

Technology Incubator Hub, University of Nigeria, Nsukka

Innovation Ecosystem

- **The Science Park** is a systematic organization of events such that Innovation meets commercialization in the context of a ‘micro industrial’ platform.

LION SCIENCE PARK
(Science & Technology Ecosytem)

University of Nigeria

IDEON SCIENCE PARK

lundavision

University-based Science Park
Science, Technology, Innovation and Incubator Hubs
Intellectual Property Promotion and Protection
Research Commercialization and Entrepreneurship
Start-ups and SMEs Technology-based Enterprises, Industrial Growth and SME Clusters
Oil Sector, and Agricultural Innovation systems
Innovation Ecosystem and Innovation Governance Framework

The Lion Science Park Initiative, University of Nigeria, Nsukka

CONCLUSION

✓Commercialisation of university R&D outputs is a key to its growth & development

✓The Intellectual Property (IP) in Nigerian universities is a gold mine, yet to be exploited for the benefit of the nation and the world at large.

✓R&D is critical a factor for sustainable development and requires a localized and national approach and commitment to achieve success

➢Competiveness of an university is based on the number of spin-off companies and products in the market and not necessarily the number of graduates

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Certificate of Participation

This is to Certify that

HAS COMPLETED A TWO DAY TRAINING WORKSHOP ON
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AS FACILITATED BY NATIONAL OFFICE FOR TECHNOLOGY ACQUISITION AND PROMOTION (NOTAP)
HELD ON 28TH AND 29TH FEBRUARY, 2024.

Engr. Prof. Emenike C. Ejiogu, *FNINEE*
Director/ Centre Leader (ACE-SPED)


HIGHLIGHTS OF THE
WORKSHOP INCLUDE