Patents Administration in the Technology Era: The African Experience and Lessons from other Jurisdictions

> Uchenna Njoku 14 November 2021

# Outline

Introduction

Patent Administration and Diversity of Tech Inventions

Patent Crisis and the Way Forward

Lessons from the UK and EPO Jurisdictions

Conclusion

#### Introduction

• Meaning of Patents

> IP right conferring limited monopoly usually 20 years on the holder.

- Justification for Patent Grants
- Incentive for disclosure of an invention which would otherwise have remained secret.
- Extent of Patent Protection
- > Infringement action against third parties

#### Introduction

• Requirements for Patent Grant

> Novelty

➢ Inventive Step

Industrial Application, Sufficiency and Plausibility of Invention
 Patentable Subject Matter

S. 1(1) Nigerian Patent & Designs Act, Section 1(1) UK Patents Act, Section 3(1) Ghanaian Patent Act

### Patent Administration

- Patent Application
- Examination and Grant of Patent
- "Although the PDA stipulates the conditions that must be satisfied before an invention can be the subject of a patent grant, the Nigerian Patent Registry does not, in practice, insist on a strict satisfaction of the conditions...Where these requirements are met, the Patent Registry will grant a patent to the inventor without subjecting the invention to a substantive examination for compliance with the patentability requirements of Section 1 of the PDA." Fred Onubia & Others, 'The Patent Litigation Law Review: Nigeria', The Law Reviews.
- > Opposition Proceedings and Revocation of Patent

• Patent Protection for Tech Inventions

"The patent system is in crisis... In the pharmaceutical industry, there seems to be a strong consensus that patents are critical to innovation... Lawyers and executives in the information technology (IT) industries, by contrast, almost invariably see the patent system as a cost rather than a benefit to innovation." - Dan L. Burk and Mark A. Lemley, 'The Patent Crisis and How the Courts Can Solve It', University of Chicago Press

- The Unitary Patent System and Diversity of Tech Innovation Biotechnology, Pharmaceutical and Software Industries
- Factors Influencing Diversity of Tech Innovations
  Cost of Research and Development
  Size of Firm
- Other Incentives to Innovate



- Need for a Responsive Patent Administration System
- Encourage Research and Development
- Incentive Tech Innovations
- > Balancing the Need for Patent and Public Policy Considerations

- Alternative Solutions to the Patent Crisis
- Legislature Specific Patent Laws
- Patent Authorities Formulation of Different Patent Standards
- Courts Industry-sensitive Patent Decisions

"The great flexibility in the patent statute presents an opportunity for courts to take account of the needs and characteristics of different industries. Courts can, and should, apply the general rules of patent law with sensitivity to the characteristics of particular industries." Dan L. Burk and Mark A. Lemley, 'The Patent Crisis and How the Courts Can Solve It'.

- How Courts have Interpreted Patent Requirements to Suit Industry Standards
- > Novelty and Availability to the Public
- Concepts of 'prior disclosure' and 'enablement'

"The prior art description may be sufficient in itself to enable the ordinary skilled man, armed with general knowledge of the art, to perform the subject matter of the invention. Indeed, when the prior art is a product, the product itself, though dumb, may be enabling if it is 'available to the public' and a person skilled in the art can discover its composition or internal structure without undue burden." Lord Hoffman in Synthon BV v. Smithkline Beecham Plc [2005] UKHL 59

Inventive Step

Obviousness', the 'Person Skilled in the Art' and the 'State of the Art'.

- The EPO Approach
- $\circ$  The Problem and Solution Approach
- $\circ$  Invention as a Solution to a Problem
- Limitations of the EPO Approach

Compare Section 1(2) of Ghanaian Patents Act on definition of an 'Invention'.

- Inventive Step
- UK Approach
- The Pozzoli Test
- Who is the notional 'person skilled in the art'?
- What is the inventive concept of the claim?
- What, if any, difference exists between the matter cited as forming 'part of the state' of the art and the inventive concept of the claim, or the claim as construed?
- Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps that would have been obvious to the person skilled in the art, or do they require any degree of invention? – Jacob LJ in *Pozzoli SpA v. BDMO* SA [2007] EWCA Civ 588.

- Industrial Applicability
- Meaning of Industry Chiron Corp v. Murex Diagnostics Ltd [1996] RPC 535
- Early Patent Applications Justification and Shortcomings
  Human Genome Sciences Inc. v. Eli Lilly and Company [2011] UKSC 51.
- Need to encourage R&D vs Public Policy Considerations
- Opinion of Experts on the Peculiar Nature of Certain Industries

- Sufficiency
- Disclosure of comprehensive information to enable the public use the invention after the monopoly.
- > Lack of comprehensive information or insufficiency may lead to revocation.
- > Types of Insufficiencies
- Classical Insufficiency *Regeneron Pharmaceuticals Inc. v. Kymab Ltd* [2020] UKSC 27.
- Insufficiency due to excessive breadth claim *Biogen Inc. v. Medeva Plc* [1996] UKHL 18

- Patentable Subject Matter
- > Inventions against Public Order and Morality
- Harvard/Oncomouse [1990] EPOR 501
- Invention method for producing an oncogenic test animal 'The genetic manipulation of mammalian animals is undeniably problematical in various respects, particularly where activated oncogenes are inserted to make an animal abnormally sensitive to carcinogenic substances and stimuli and consequently prone to develop tumours, which necessarily cause suffering. There is also a danger that genetically manipulated animals, if released into the environment, might entail unforeseeable and irreversible adverse effects.'

- Patentable Subject Matter
- Inventions against Public Order and Morality
- Reflections
- In the face biotech research and innovations, should patents be granted for use and mutilation of human embryos to develop pregnancy therapies for commercial gain?
- Should patents be granted for inventions cloning human beings to create advanced and genetically better species?

#### Africa in Perspective

- Patent Authorities Need to Scrutinize Patent Applications in line with the law and judicial authorities
- Role of Courts in Patent Statutes Interpretation Striking the balance between need to encourage innovation and public policy considerations for patent justification

## Conclusion

- Recap of Key Points
- Questions, Comments, Observations

# THANK YOU!