



IP Generating Start-up vs IP Consuming Start-up

Dr McLean Sibanda

Managing Director: Bigen Global Limited

International Consultant and IP Expert (South Africa)

Youth Entrepreneurship Regional Forum on the “Critical Role of Intellectual Property (IP) and Innovation for Youth Entrepreneurship and Start-ups

organised by the World Intellectual Property Organisation (WIPO) in Collaboration with the Government of Rwanda, the East African Community Science and Technology Commission (EASTECO), the Office of the Special Adviser for Africa (OSAA) with financial support from The Japan Patent Office (JPO), in partnership with the African Regional Intellectual Property Organisation (ARIPO) and the African Intellectual Property Organisation (OAPI) with the participation of YOULead Africa

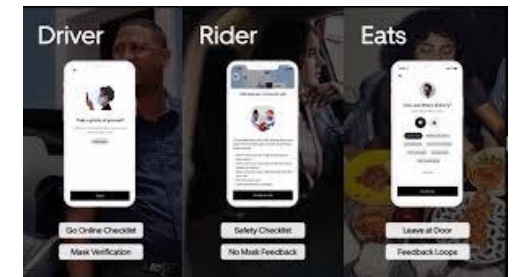
April 25 and 26, 2022

Table of Contents

- IP Generating vs IP Consuming Start-ups
- Intellectual Property in Perspective of Start-ups
 - Different Forms and IP Management
- Strategic Aspects of IP
 - IP Generation, Use, Technology Transfer
 - IP Audit and Due Diligence
- Conclusions

IP Generating vs IP Consuming Startups

- ▶ **IP Generating Start-up** is a startup that is centered round a core IP that needs a business idea to prosper – typically an invention protected by a patent
- ▶ **IP Consuming Start-ups** is a startup whose business idea needs technology to exist



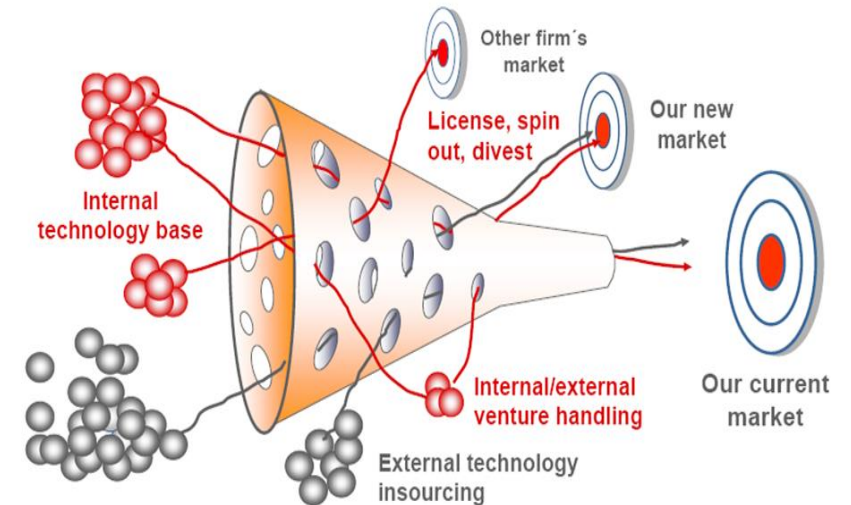
In practice, no clear lines of separation, as IP Consuming Start-ups realise that to be competitive, need to generate some IP

IP Generating vs IP Consuming Start-ups

The IP Paradox within context of Open Innovation

■ IP Generating Start-ups

- Often require third party IP for freedom to operate or competitiveness
- IP Portfolio Approach
- Licensing a major consideration
- Strategic JVs / Partnerships also important (e.g. Samsung vs Apple cross licensing)



■ IP Consuming Start-ups

- Often license in third party IP to give effect to business idea
- Universities as target licensors
- In time, they build capabilities to generate IP in-house or through contract R&D
- Consulting to build capabilities

IP Generating vs IP Consuming Start-up

IP Generation

■ Internal Activities

- Company initiated and funded projects
- Company initiated but externally funded projects
- Contracted or commissioned work

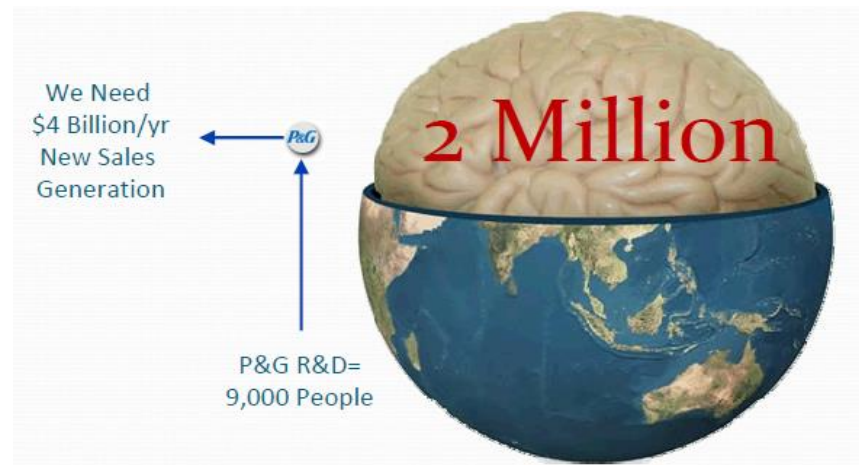
■ External Activities

- Outsourced work or development
- Students and employees in course of studies but on company projects
- Joint ventures / collaboration /acquisitions (*see Uber case study*)

To:

From:

R&D



C&D

IP Consuming Start-up that became IP Generating

Study: Uber

31 JAN 2019

CRAFTING AN EFFECTIVE PATENT STRATEGY: HOW UBER BUILT ITS PORTFOLIO

By Michael K. Henry, Ph.D.



uberX

Affordable, everyday rides

LEARN MORE >



UberSUV

Affordable, everyday rides in
SUVs

LEARN MORE >



UberBLACK

High-end rides with professional
drivers

LEARN MORE >

Two key features of Uber's patent strategy:

- 1) Relatively small patent portfolio (quality over quantity). In 2018 Uber had:
 - a) *272 U.S. patents*
 - b) *367 granted worldwide patents*
 - c) *single digit applications per year*
- 2) Expand their patent portfolio through acquisitions

IP Consuming Start-up that became IP Generating

Case Study: Uber Four-Pronged Approach to Size of Portfolio

- 1) Focus on patenting only the most relevant inventions — namely, products strategically important to Uber’s business goals, such as those covering the core business as well as product differentiators
- 2) Focus on obtaining patents that can actually be enforced. To pursue litigation against a competitor, you need to be able to detect an act of infringement using publicly available information. When detection will be difficult, Uber’s team prefers to use trade secret protection instead
- 3) Focus on inventions with cross-licensing potential - could open up future revenue streams
- 4) Regularly pruning patents that aren’t valuable over time

IP Consuming Start-up that became IP Generating

Uber Four-Pronged Approach to Acquisition of IP

- 1) Identify portfolios for sale: Uber has developed its own acquisition portal to directly identify and solicit assets
- 2) Automated review of each offered portfolio: Uber uses analysis software to evaluate relevance of each portfolio to their business needs, as well as strength of patents' claims
- 3) Manual review of shortlisted portfolios: Each remaining portfolio is assigned to an internal team that deeply understands the relevant industry sector
- 4) Negotiate a deal: This is the most complex step of the process; ideally, deals are mutually beneficial. In its communications, Uber prioritizes building trust through honesty and transparency.



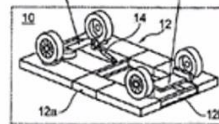
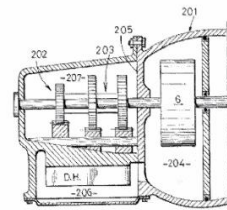
Patent Portfolio in Transport Services relevant tech incl.

- Call interactions
- Guided routes
- Geosearch
- Rideshare
- Autonomous technologies (keep that door open just in case)

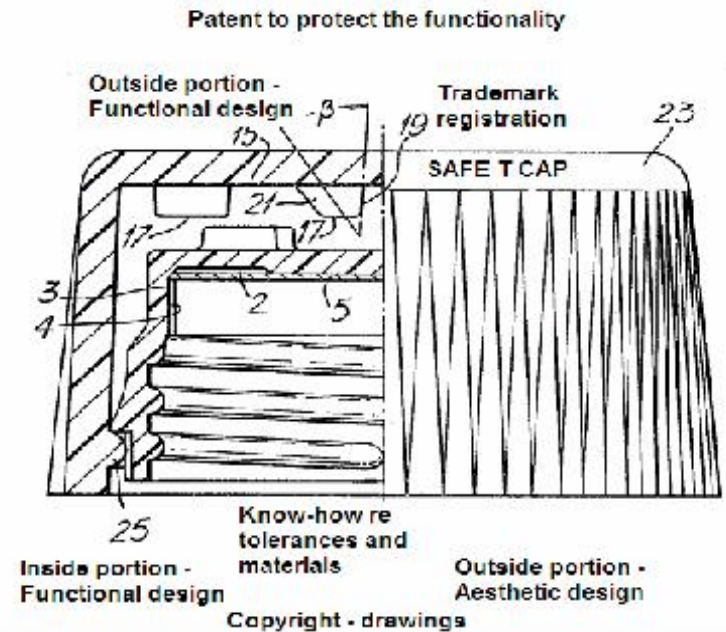
Intellectual Property In Perspective

Different Forms of IP

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
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



Google



Intellectual Property in Perspective

IP Management – the case of Patents

- IP Policy
 - how the start-up identifies, protects and manages IP (in all forms)
 - Engagement with external parties, incl. NDAs
 - IP clauses in employment contracts
 - IP arising from subcontracted work
- Clarity on process for assessing protection criteria (*e.g., in patents*)
 - Excluded subject matter
 - Novelty
 - Inventiveness
 - Utility



Bernard Kiwia is the founder of Tanzania's innovator school Twende

Intellectual Property in Perspective

IP Management - Non-Disclosure Agreement (NDA)

- Enables sharing of information under confidentiality
 - Prior to filing patent applications
 - Applying for funding
 - Further development or testing of the idea
 - To facilitate commercial terms discussion
 - Exploring partnerships / collaborations
- Important that purpose and information to be shared is clear
- Note that many funders do not sign NDAs because see many ideas on a daily basis
- Duration – typically anything from a couple of years to 10 years after disclosure (could be longer in case of trade secrets)
- See various templates: <https://ideanav.co.za/confidentialities/>

AGREEMENT FOR TWO WAY DISCLOSURE OF CONFIDENTIAL INFORMATION

This agreement is made between and (hereinafter referred to as "the Parties").

Whereas the Parties have agreed to discuss issues relating to their businesses and specifically to ("the Purpose") it may be necessary or desirable for one party ("Disclosing Party") to disclose to the other party ("Receiving Party") information which may be of a proprietary or confidential nature.

Now therefore it is agreed as follows that:

1. The Receiving Party shall hold in confidence all information and ideas of any kind (hereinafter referred to as "Confidential Information") disclosed to it by the Disclosing Party which are identified at time of disclosure as being confidential. Confidential Information shall also include information obtained as a result of being allowed access to any premises where the Disclosing Party may carry on business as well as any information, the nature of which makes it clear that the information is confidential.
2. The Receiving Party undertakes to apply to all Confidential Information disclosed in accordance with the provisions of this Agreement the same degree of care with which it treats and protects its own proprietary information against public disclosure, but no less than a reasonable degree of care. All such information and ideas shall not be disclosed to any third party without the prior written consent of the Disclosing Party. Where such consent is granted disclosure shall only be made to a third party where such third party accepts similar obligations of confidence to those contained in this Agreement.
3. The Receiving Party undertakes to restrict its use of Confidential Information to work performed in conjunction with the Disclosing Party related to the Purpose and to ensure that dissemination of Confidential Information within its own organisation is on a strict "need to know" basis, and that the Confidential Information is copied only on a strictly necessary basis in connection with the Purpose.
4. The Parties acknowledge that the Confidential Information is valuable and that damages may not be an adequate remedy for any breach of this Agreement. Accordingly, each Party agrees that the non-breaching Party will be entitled to seek equitable relief (including injunctive relief) from any court of competent jurisdiction in the event of any actual or threatened breach of this Agreement.
5. For the purposes of this Agreement information and ideas shall not be considered to be Confidential Information if such information and ideas are:
 - a. in or pass into the public domain other than by breach of this Agreement, or
 - b. known to the Receiving Party prior to disclosure by the Disclosing Party, or
 - c. disclosed to the Receiving Party without restriction by a third party having the full right to disclose, or
 - d. independently developed by an employee of the Receiving Party to whom no disclosure of Confidential Information

Intellectual Property in Perspective

IP Management – Employment Contracts and the Law

- Important that each person doing work for company signs agreement with intellectual property protection clauses
- Common law position
 - Patents - Course and Scope of employment
 - Copyright – Course of Employment

- c.f. s59(2) of the **Patents Act:**

‘Any condition in a contract of employment which –

(a) requires an employee to assign to his [or her] employer an invention made by him [or her] otherwise than within the course and scope of his [or her] employment; or

(b) restricts the rights of an employee in an invention made by him [or her] more than one year after termination of the contract of employment, shall be null and void’

Intellectual Property in Perspective

IP Management – Employment IP Clauses (an example)

9. INTELLECTUAL PROPERTY

9.1 The Employee hereby acknowledges and confirms that ownership of any and all intellectual property rights (including but not limited to inventions, copyright in any works, computer programs) developed by the Employee during the course and scope of employment with the Company in terms of this Agreement shall vest in the Company. The Employee hereby cedes and assigns to the Company, all rights in such intellectual property.

9.2 In the event that an application for registration or recordal of an intellectual property right may only be filed in any country by natural person, the employee hereby undertakes to file such application, on demand by the Company, and to assign any and all rights therein and thereto to the Company as soon as possible at no charge to the Employee and at the Company's expense.

Intellectual Property in Perspective

IP Management – Dealing with Publicly Funded Institutions

- Legislated by National Laws / National Policy or Institutional IP Policy
 - Ownership generally resides with institution
 - Inventor has right to benefit share
- Liaise with Technology Transfer Office in case of university or science council
- Always ask whether the IP was funded by government funding
- Confirm ownership from funding agency
- Determine any licensing restrictions and compliance with enabling laws



Intellectual Property in Perspective

IP Management – Commissioned Works

- **“Author”** in relation to computer programs defined as “the person who exercised control over the making of the computer program”

- **Employment Contract**
 - Copyright created during course of employment belongs to the employer
 - If employed as a marketer and write software unrelated to what you employed to do, without use of employer resources – then falls outside scope of employment

- **Outsourced Development**
 - Person exercising control does not have to be a computer programmer to be able to control the writing of the code
 - If no other person / company actually directs direction development should proceed or lacks authority to terminate further development should it wish to do so, then you are the author, and thereby the owner of copyright in the code

Intellectual Property in Perspective

IP Management – Commissioned Works (Software)

- Copyright can only be assigned in writing
- Mere fact that someone has commissioned development of software and underlying code, and paid developer for the service does not mean that they own the copyright in the code
 - If developer exercised control over the development, and
 - There is no written agreement signed by developer stating that the copyright is assigned to the other party, then the developer remains the owner of the copyright in the code



Strategic Aspects of Intellectual Property

Use of IP – the case of patents (the patent document)

- **Importance of disclosure requirement**

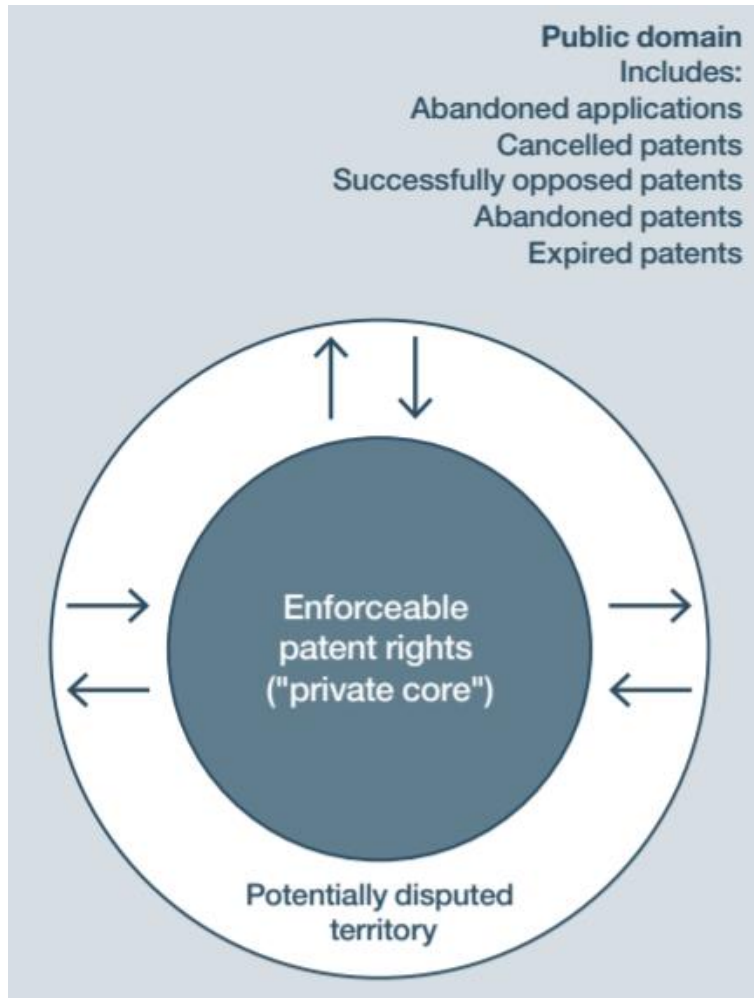
- Scope of protection must be clear in claims
- Sufficient disclosure of invention: i) Teach the invention, ii) Enable others to build on

- **It is therefore evident that patent documents are very important sources of technological innovation**

- Disclose not only the invention BUT manner to carry it out
- Can determine if invention has use in your business – if so
 - i) Is it protected in your country?
 - ii) Is the patent still valid and in force (maintenance, and 20 years?)
 - iii) Can you obtain a licence?
 - iv) Could you collaborate with the owners?

Strategic Aspects of Intellectual Property

Use of IP – the public domain



- Patent Searches
- Search Reports
- Patent landscape
- Verification with Patent Registers
- Competitor analysis followed by patent searches
- Licensing
- JV / Technology Transfer



Strategic Aspects of Intellectual Property

Use of IP – Licensing

- **Grant of IP owner's rights**
 - Patent – manufacture, sell, import, exercise, use
 - Copyright – to reproduce a work
- **Another party**
- **For defined period of time**
- **In return for an economic interest or other**
 - Royalty, Lump sum
 - Another licence - cross licence
- **Similar to 'lease / rental agreement**
- **Whole or in part**



1 ■ Licence Out


2 ■ Licence in



■ Cross Licence

Strategic Aspects of Intellectual Property

Use of IP – Anatomy of a Licence Agreement

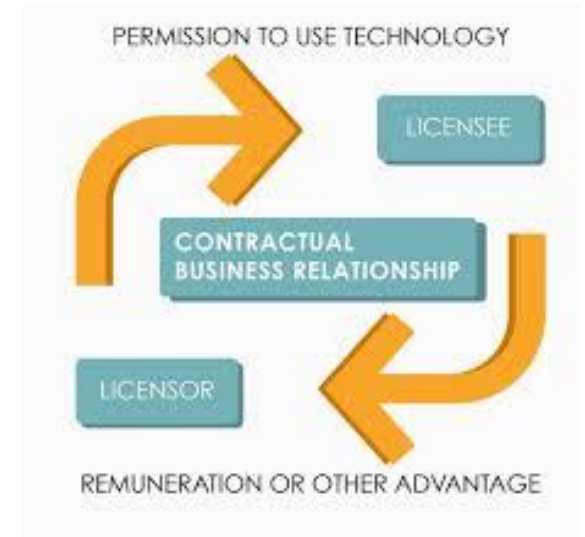
○ Definition of Licensor and Licensee	○ Territory
○ Types of Licence: Exclusive, Sole, Non-Exclusive	○ Rights Licensed (<i>Manufacture, use, etc.</i>)
○ Term or Duration	○ Consideration / Royalty payable
○ Subject matter of Licence: Definition of Intellectual Property or Technology	○ Basis for Royalty (know-how and patents, etc.) 
○ Rights to improvements	○ Maintenance of IP
○ Any limitations by Field	○ Infringement
○ Claims by third parties / indemnities	○ Right to sub-licence
○ Warranties by licensor	○ Acknowledgement of Right in IP
○ Recordal of Licence: certain rights granted to licensee	○ Dispute Resolution
○ Breach of contract	○ Restrictions

For More Information on Negotiating licences - issues to consider, refer to: <https://snz.co.za/articles/commercial/negotiating-licences-issues-to-consider/>

Strategic Aspects of Intellectual Property

Use of IP – Commercial Considerations

- Potential licensing opportunities
- Investment required to bring the technology to market?
- Can transfer of invention to licensee be achieved solely by reference to a patent? Is there need for additional technical support (Know-how)?
- Is the technology the basis for a start-up or a spin-out company?
 - Equity vs. Royalty
 - External funding for development and commercialisation
 - Market size and sophistication
 - Management of the spin-out / start-up



Case Study – Technology Transfer

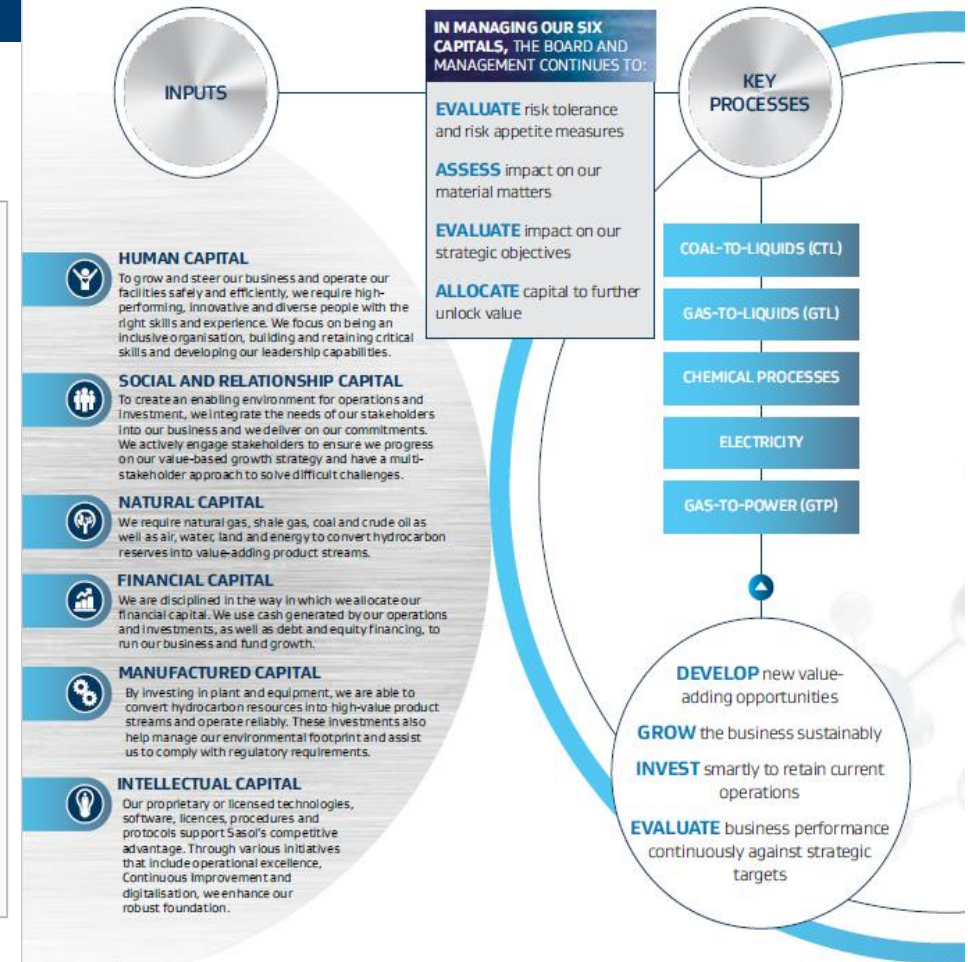
The case of Sasol

- 1927: South African oil-from-coal industry study
- After WW2, acquired rights to method of using the **Fischer-Tropsch process patented** from M W Kellogg Corp
- **1950: government incorporated a State-owned company** South African Coal, Oil and gas Corporation
- Initial reactors from Kellogg and Lurgi gasifiers were tricky and expensive to operate.
- Sasol improved these reactors (new intellectual property and patents created) to eventually yield about 6500 barrels per day

Sasol Limited	
	
Trading name	Sasol
Type	Public company
Traded as	NYSE: SSL ↗ JSE: SOL ↗
Industry	Oil and gas Chemical
Founded	1950
Headquarters	Johannesburg, South Africa
Key people	David Constable (CEO)
Revenue	▲ US\$21.78 billion ^[1]
Operating income	▲ US\$4.72 billion ^[1]
Net income	▲ US\$3.11 billion ^[1]
Number of employees	34,000
Website	www.sasol.com ↗

USING THE SIX CAPITALS TO CREATE VALUE

We create value for our stakeholders by developing and commercialising technologies and building and operating facilities to convert mostly low-cost hydrocarbon feedstock into a range of high-value product streams. These include chemicals used in industrial and consumer products, liquid fuels used to move people and goods, and electricity to power our facilities and contribute to South Africa's and Mozambique's power-generating capacity.



Strategic Aspects of Intellectual Property

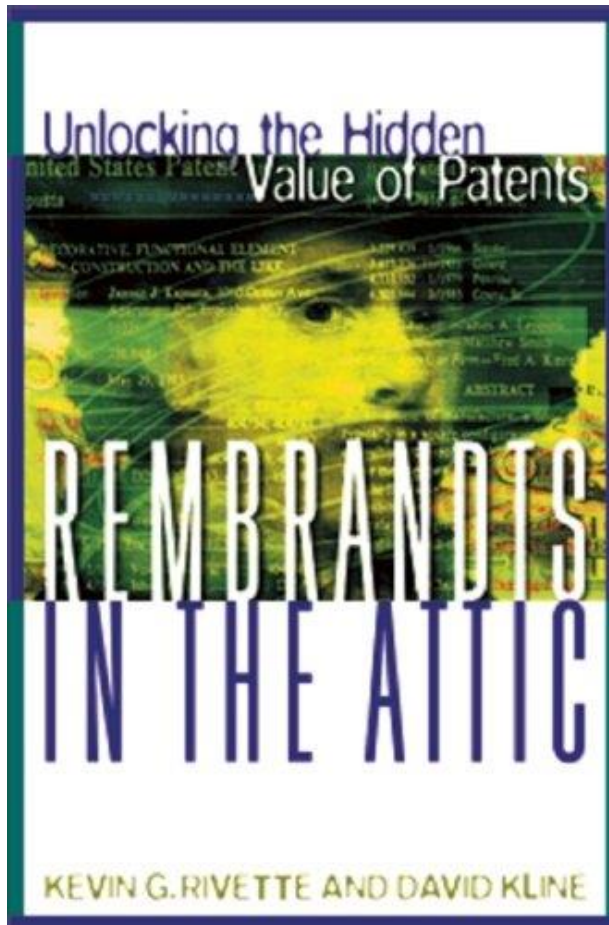
IP Audit and Due Diligence

- IP audits can help:
 - assess, preserve, and enhance IP
 - correct defects in IP rights
 - put unused IP to work
 - identify potential IP assets
 - identify risks that a company's products or services infringe another's IP
 - implement best practices for IP asset management
- A thorough IP audit involves a review of:
 - company's IP assets
 - the company's IP-related agreements, policies and procedures, and competitors' IP

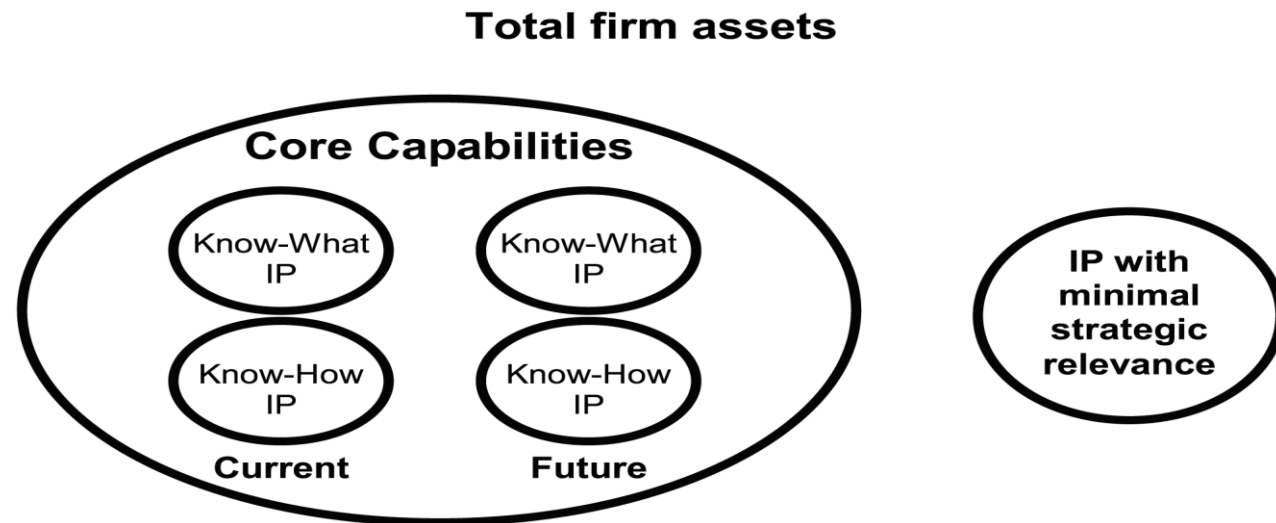


Strategic Aspects of Intellectual Property

IP Audit and Due Diligence



- Value adding IP identified
- Ease of transaction / due diligence
- Core / Non-core Assets



Strategic Aspects of Intellectual Property

IP Audit and Due Diligence (Status of IP)

1. Determine Potential IP assets owned and used by the business

- Who owns the IP assets:
 - Company (SME)
 - Employee
 - Joint Ownership between your company and another company (in which case what are the terms)
 - Licensee (in case IP Asset is licensed out)
 - Under License (incase IP is licensed to the company)

2. Are IP assets protected?

- YES:
 - through which IP right? (Patents, Nos, Trademarks, copyrights, trade secrets (interrogate this))
 - Which countries?
 - Is protection still valid and in-force?
 - Confirm renewal dates and payments
- NO:
 - Determine best strategy in protecting the IP assets (if protectable)

Strategic Aspects of Intellectual Property

IP Audit and Due Diligence (Status of IP ... 2)

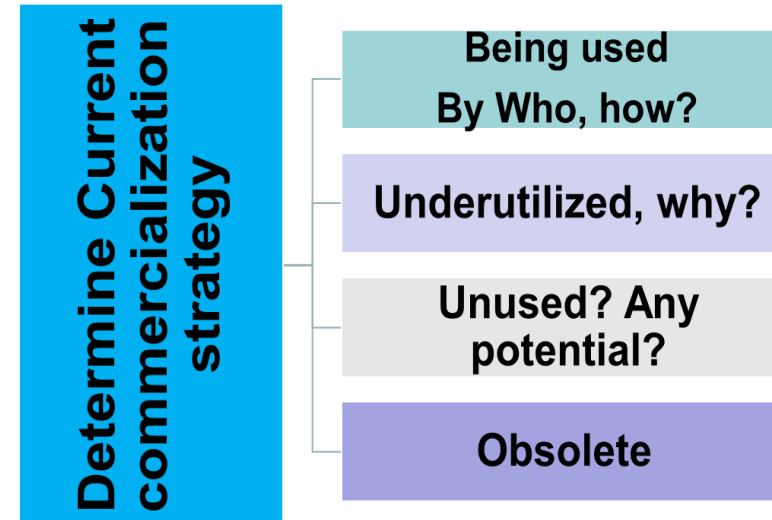
3. IP Protection

- New markets or territories?
 - Do you have freedom to operate?
 - e.g., McDonalds SA case in 90s.
 - What about IP protection?
 - e.g., can be possible to apply for trademark protection, national phase of PCT patent applications, grace periods in those countries, etc.
 - Applicable laws?
- Cost considerations!



McDonald's Trade Mark: 'Ex Africa semper aliquid novi'¹

In the McDonald's appeal² McDonald's Corporation's claim that its trade mark *McDonald's* is known in South Africa to be a well-known foreign trade mark and therefore, irrespective of registration under the Trade Marks Act, is entitled to protection. The court also refused claims by the other parties for the cancellation of the registered trade mark *McDonald's* and various other trade marks on the grounds of non-use.



© 2020, Rose Mboya, Kenya

Strategic Aspects of Intellectual Property

IP Audit and Due Diligence (Essential Aspects of a Transactional DD)

■ Data Room

- Request indexed files from target company
- Use check lists

■ Interviews with key personnel

■ Products in the marketplace

■ Warranties and indemnities

■ Internet

■ Identify, validate and verify:

- all IP (patents, trademarks, designs, copyright, etc.)

■ Searches:

- all IP databases
- Public documents
- Registers

■ Registers:

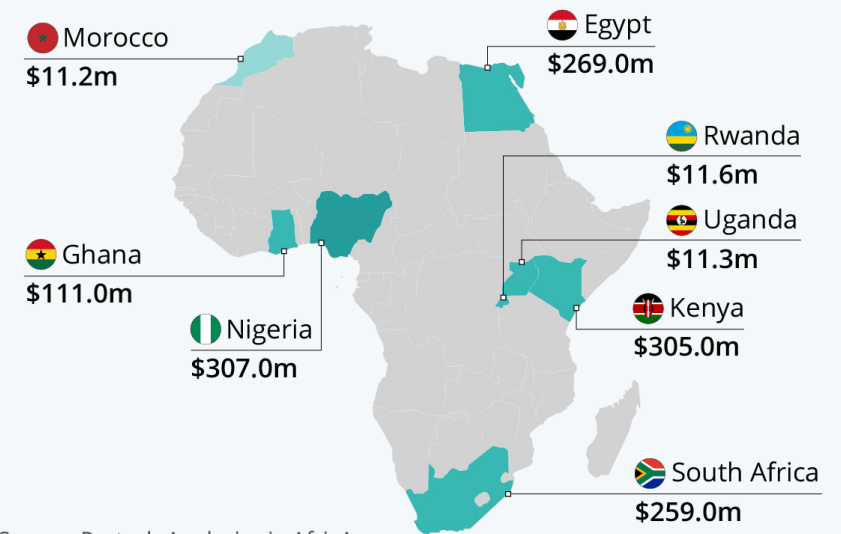
- Validity, Licensees
- Ownership
- Inventors / key staff

Concluding Remarks

- IP critical for any start-up
- Effective IP Management Critical:
 - IP generating start-ups - protection and use
 - IP consuming start-ups – understanding the public domain and negotiating and access to third party IP
 - Never one or the other – it’s a matter of timing
- Important to understand what assets are available:
 - IP Audit and due diligence
 - Clear IP Policy
 - IP considerations in employment contracts and contracted works

Where Africa's Startup Activity Is Concentrated

Top countries for CV investment in Africa in 2020
(in million U.S. dollars)



Source: Partech Analysis via AfricArena



statista

Thank You



Link for *Footprints* Kindle edition, on Amazon, is: <https://amzn.to/3Aedka8>
www.sibandalegacy.africa

 @mcleansibanda
Email: mclean.sibanda@gmail.com;

Tel / WhatsApp : +27833780230
mclean@sibandalegacy.africa