



Australian Government

IP Australia

IPRx: IP registration and exchange protocol

Case Study

APRIL 2019



IPRx Case Study



Grantly Mailes

- Associate Director, Boston Consulting Group
- APAC lead - BCG Centre for Digital Government
- APAC lead - emerging technologies
(inc. Blockchain, AI and cybersecurity)



Case Study:
IP Australia-Civic Ledger
Blockchain Proof of Concept

Civic Ledger

Australian emerging FinTech of the year 2018

Blockchain-based registration and trading platforms

Strong focus on “public good” applications:

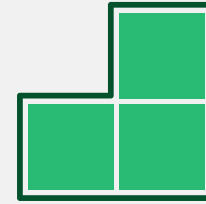
- IP rights management and markets
- Agricultural water rights
- Carbon trading, including global offsets

Civic Ledger and IP Australia Case Study



Innovation open tender study

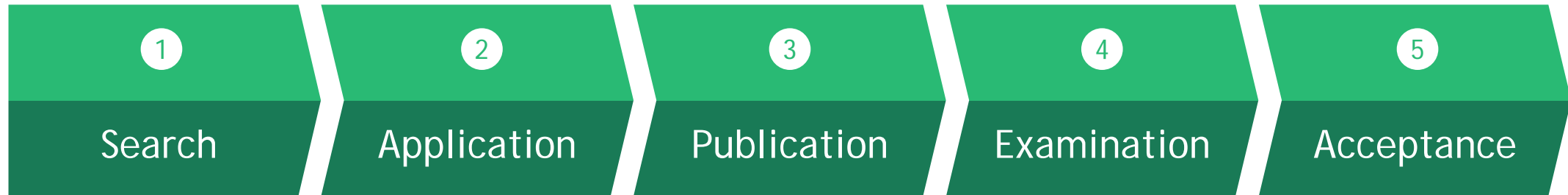
- How blockchain could integrate into the the existing IP Rights management system
- Explore a future IP Rights ecosystem that could promote the global trade and commercialisation of IP
- Future-proof the agency, provide a platform to innovate in Australian (global) IP



Two Phases

1. Digital representation and processing of IP rights
2. Global trade and commercialisation of IP

The standard patent process is robust...



... however it does not serve all of the needs of a modern economy



Every due diligence search starts from scratch



Discovery is difficult, no exchange platform



Lacks transparency, requires experienced services support



Patent purchase is long and expensive



Difficulty in collateralising IP in some cases e.g. securing loans











Limited to patents, not trademarks and copyright

IPRx - Proof of Concept: Civic Ledger & IP Australia

Welcome to the world's first IP marketplace.

Tailored to Renewable Energy & Sustainable Technology

— — —

 Solar	 Hydro	 Wind	 Geo Thermal	 BioFuel	 Turbines
 Agriculture	 Transport	 Automation	 Engines	 Mining	 Recycling

Search by Patent No, WIPO No or

IPRx provides three key functions



TOKENISES IP ASSETS

Turns an IP entitlement into a digital asset:

- Reduce friction
- Speed process
- Enable automation



CREATES A GLOBAL IP SYSTEM

Creates a global internet of federated IP registration systems:

- Speeds the process
- Increase transparency and certainty for rights owners
- Reduce costs for stakeholders



ENABLES MARKETPLACES

Promotes an ecosystem of IP marketplaces:

- Commercialisation & investment opportunities
- Speeds innovation systems

IPRx solved 8 key challenges in the IP lifecycle



Transparency



Slash DD/trade cost



Commercialisation



Increase liquidity



Global opportunity



One click trading

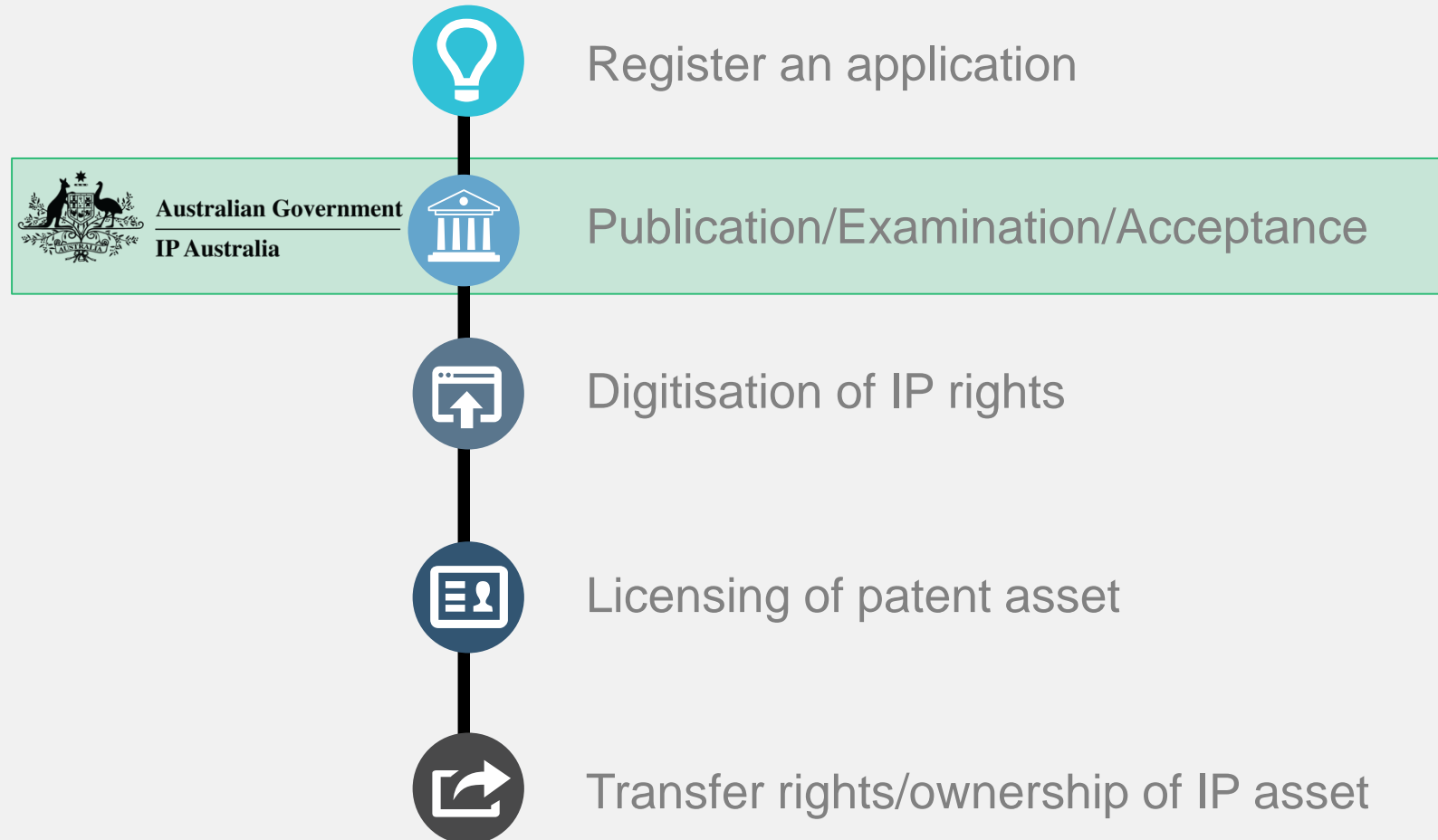


Blockchain security



Spark innovation

Phase 1 - Proof of Concept



Phase 2 - design a trading scheme for IP assets

MARKETPLACE

Tailored to Renewable Energy & Sustainable Technology

Search by Patent, I.D., or IP Asset



DISCOVERY

Learn Patent Litig

Patent No.	Asset Price	Asset Price	Asset Price
10,000,000	\$1,000,000	\$1,000,000	\$1,000,000
10,000,000	\$1,000,000	\$1,000,000	\$1,000,000
10,000,000	\$1,000,000	\$1,000,000	\$1,000,000

ENFORCEMENT

File for Foreclosure of Assets

Asset Price: \$1,000,000

Enforcement Options: [Details]

Phase 2 - Extension of PoC to a marketplace

Welcome to the world's first IP marketplace.

Tailored to Renewable Energy & Sustainable Technology


Solar Hydro Wind Geo Thermal BioFuel Turbines
Agriculture Transport Automation Engines Mining Recycling

Search by Patent No, WIPO No or

Phase 2 - User dashboard




The screenshot shows the user dashboard for Tim Roberson on the IP Australia website. The header includes the Australian Government logo, navigation links for IP Search, How it Works, and Contact, and the user's name with a profile icon. The main content area greets the user and provides a brief overview of the dashboard's purpose. Below this are three main navigation icons: Patents, Licences, and Orders. The 'My Licences' section features a detailed view of a specific licence, including its title, validity period, and associated numbers.

Australian Government
IP Australia


[IP Search](#) [How it Works](#) [Contact](#) **Tim Roberson** 

Hi Tim Roberson,

This is your patent dashboard.
From here you can see all the patents you own, any licenses you have, and view the status any current bids or offers for licenses.

 Patents  Licences  Orders

My Licences



Hybrid solar and chemical looping combustion system for use in power generation system, has fuel reactor which is to be heated directly or indirectly by concentrated solar energy

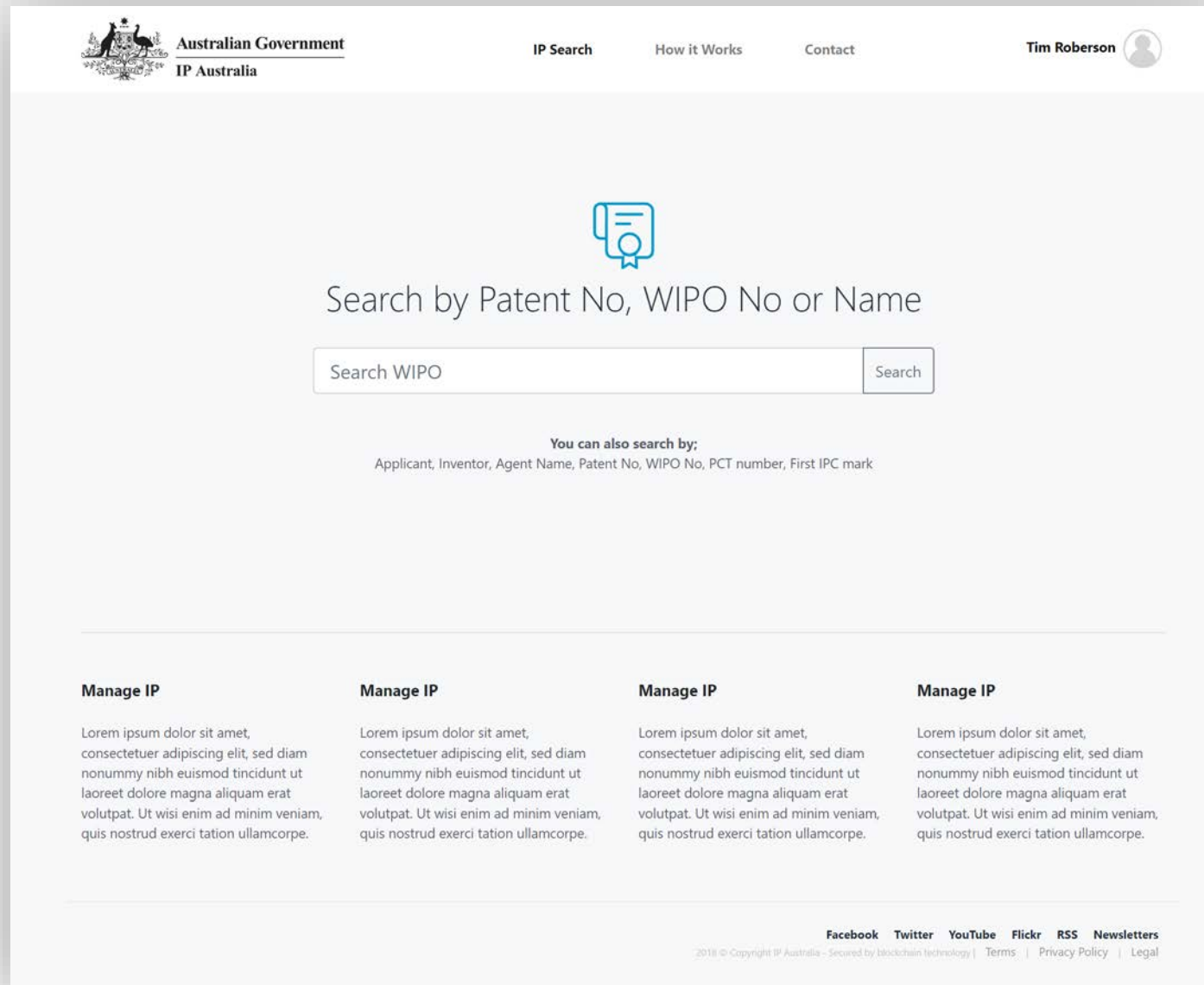
Applicant(s): Tim Roberson Inventor(s): Green, Martin Andrew Agent Name: Peterson Patents
Patent No. **2006238988** WIPO No. PCT number. **PCT/AU2014/000954** First IPC mark.

Valid to 09-Jul-2021
Licence No. **2006238988/0**
Transaction ID. 02018691550

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Phase 2 - product search and discovery



The screenshot shows the IP Australia website's search interface. At the top left is the Australian Government logo and the text 'Australian Government IP Australia'. To the right are navigation links for 'IP Search', 'How it Works', and 'Contact'. Further right is a user profile for 'Tim Roberson' with a circular icon. The main content area features a blue icon of a document with a ribbon seal. Below the icon is the heading 'Search by Patent No, WIPO No or Name'. A search input field contains the placeholder text 'Search WIPO' and a 'Search' button. Below the input field, it says 'You can also search by:' followed by a list of search criteria: 'Applicant, Inventor, Agent Name, Patent No, WIPO No, PCT number, First IPC mark'. The bottom of the page has a grid of four 'Manage IP' sections, each with a heading and a paragraph of placeholder text. At the very bottom, there are social media links for Facebook, Twitter, YouTube, Flickr, RSS, and Newsletters, along with a copyright notice: '© 2018 IP Australia - Secured by blockchain technology | Terms | Privacy Policy | Legal'.

Phase 2 - product search and discovery

Latest Patents Listed



Patent No. **2006238988**

Hybrid solar and chemical looping combustion system for use in power generation system, has fuel reactor which is to be heated directly or indirectly by concentrated solar energy

10,000.00 per licence

3 year licence, limited usage

Application status. **FILED**

Filing Year.
2013

Earliest priority date.
02-10-2013



Patent No. **2009262368**

Granulator has impact surface that is kept at preset distance from rotary atomizer and at preset angle, such that portion of droplets are not fully solidified before contacting with impact surface

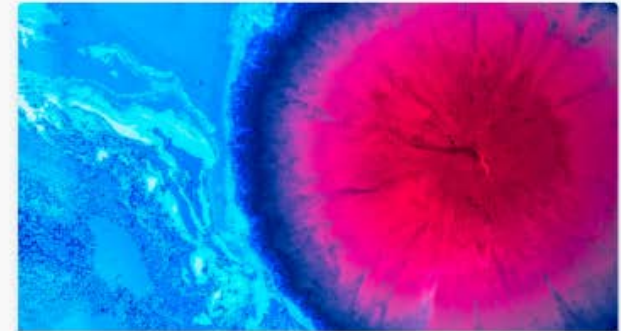
13,000.00 per licence

4 year licence, limited usage

Application status. **FILED**

Filing Year.
2009

Earliest priority date.
27-06-2008



Patent No. **2014366896**

Stimulating and maintaining microbial consortia activity within subterranean solid carbonaceous medium to form methane comprises e.g. dosing first nutrient composition into microbial consortia environment and monitoring microbial consortia

30,000.00 per licence

7 year licence, limited usage

Application status. **FILED**

Filing Year.
2014

Earliest priority date.
25-06-2015

Phase 2 - Owner notifications



Congratulations, you have received a licensing request for one of your patents.


The licence request is for **Granulator has impact surface that is kept at preset distance from rotary atomizer and at preset angle, such that portion of droplets are not fully solidified before contacting with impact surface**. This request has been made by **Tim Roberson**. You have the opportunity to Approve or Reject this licence agreement. You will be paid **13,000.00** for this licence. It will start from the date you approve the transaction, and will expire after 4 years.

[Visit approval page](#)

From the team at PatentedMarketplace.com

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Phase 2 - Enforcement

Marketplace How it Works Contact Tim Roberson

Finalise Purchase of Licence

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

Hybrid solar and chemical looping combustion system for use in power generation system, has fuel reactor which is to be heated directly or indirectly by concentrated solar energy

Patent No. 2006238988 WIPO No. WO/2015/048845 PCT number. PCT/AU2014/000954 First IPC mark. F23C 9/00
Licence Term. 3 Licence applies to. Location, Sydney, NSW 2000, Australia

10,000.00
Single Licence
Order date: 26-Oct-2018





I agree to the terms and conditions associated with this Licence

I accept the terms and conditions associated with this marketplace

Subtotal. **10,000.00**
GST. **1,000.00**


Total Due. 11,000.00

Secured by the blockchain
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.

Payment Method    

[Complete Purchase](#)

Trade and licensing of IP rights

Marketplace How it Works Contact

Order for Non Exclusive License

Licence Details

Licence Applicant:
Tim Roberson
Company. Tim's Bits and Bobs
Location. Location, Sydney, NSW 2000, Australia

Licence Term. 4 Years
Licence applies to. Location, Sydney, NSW 2000, Australia

Order ID.
1

Order Status.
Pending

Order Placed
09-Jul-2018 15:47:22

Licence Fee
13,000.00
Single license
Does not include market fees or taxes

Original Patent Details

Patent Title.
Granulator has impact surface that is kept at preset distance from rotary atomizer and at preset angle, such that portion of droplets are not fully solidified before contacting with impact surface

Patent No. 2009262368
WIPO No. WO/2009/155666
PCT number.
First IPC mark. B01J 2/02

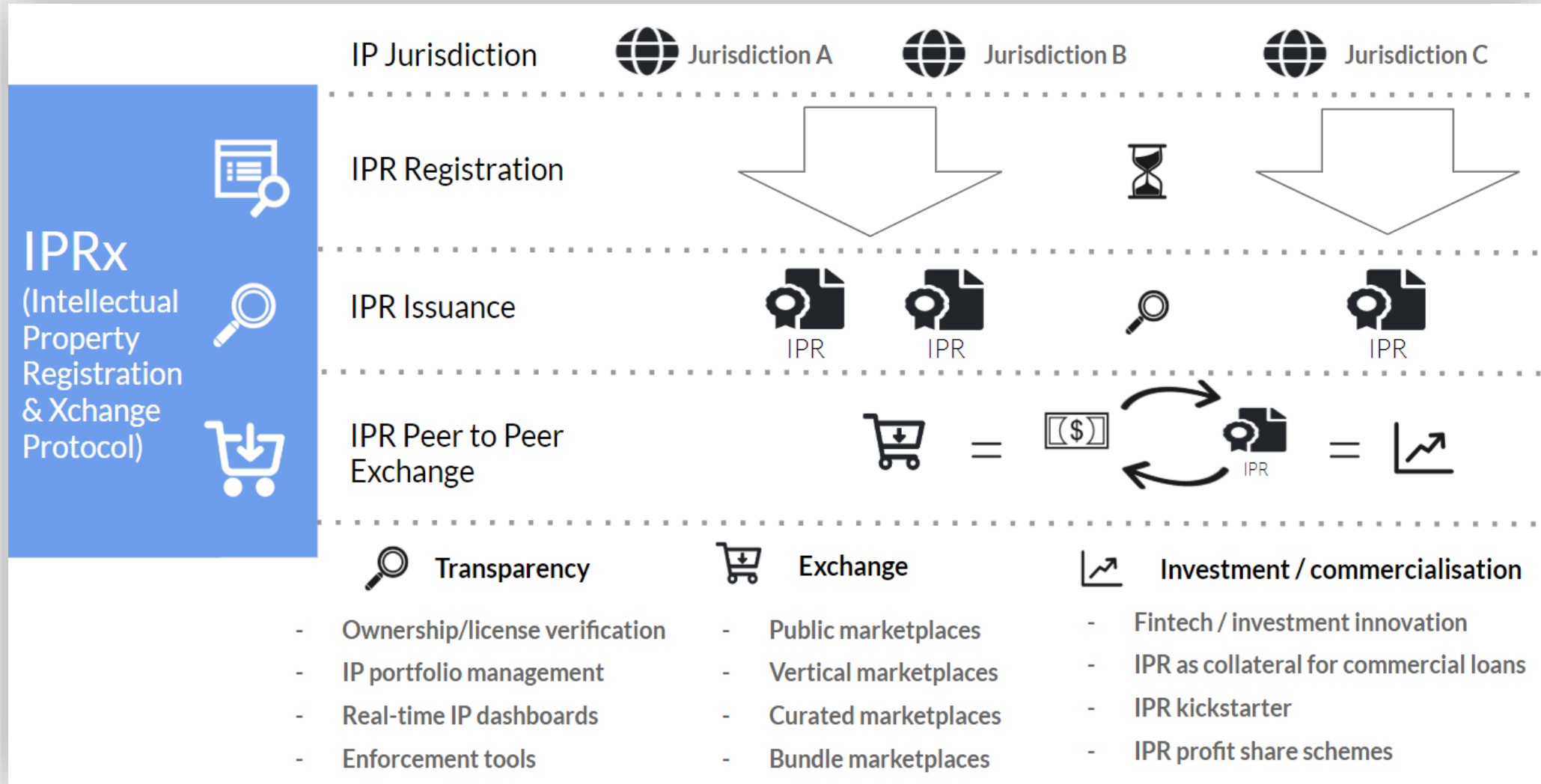
This transaction is
Secured by the blockchain

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.

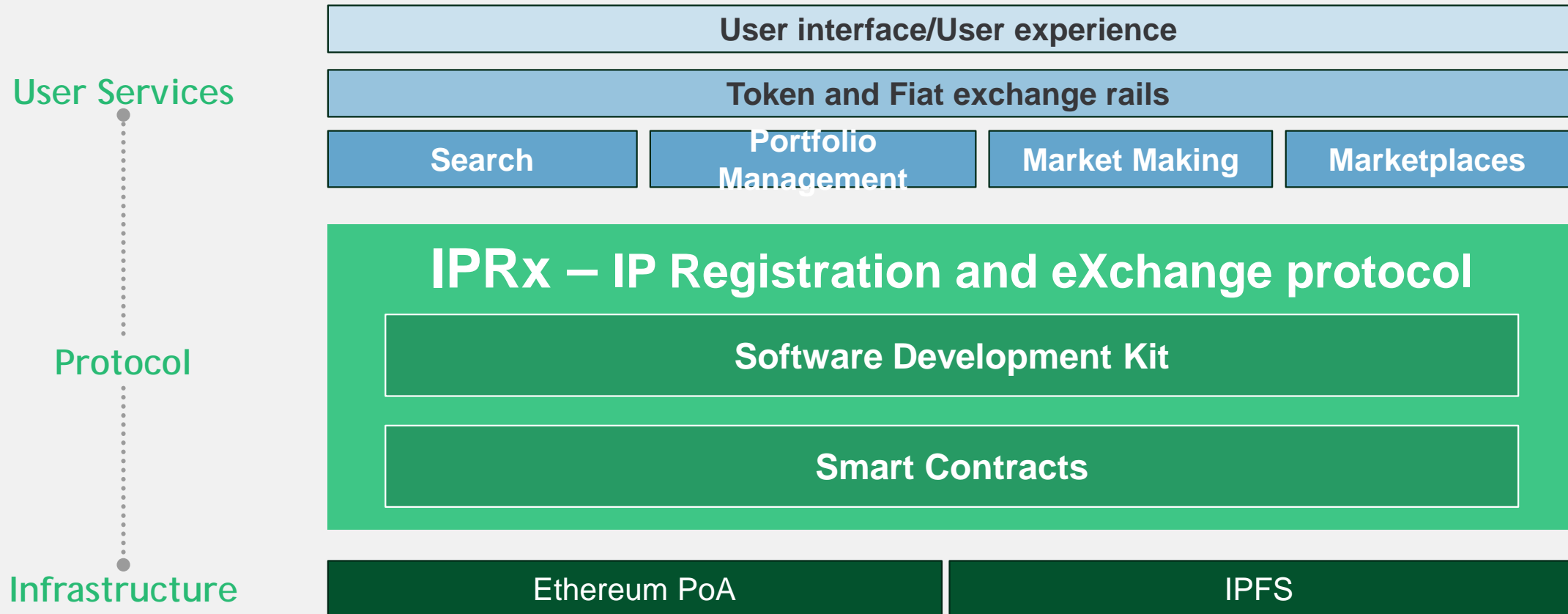
I agree to the **terms and conditions** associated with transaction.

Approve Licence Reject Licence

IPRx Process Flow



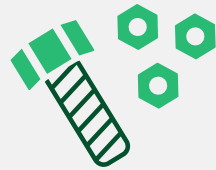
IPRx simplified technology stack



Outcomes of the PoCs



- Changes the business model for IP
- Expose the lifecycle of patents to any party
- Create an IP marketplace
- Provenance of IP - chain of title
- Automation by smart contracts



- Private versus public registrations - everything is public, is that OK?
- GDPR considerations - cannot forget anyone on the blockchain
- Can be global, but needs global treaties or agreement



- Disintermediate IP lawyers a bit
- But could change their business model

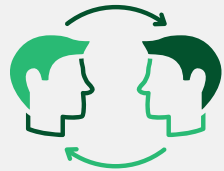


- Log every successful IP claim on the blockchain to reduce future due diligence effort on patents
- Creates a market for the due diligence efforts
- Platform open to FinTech investment and innovation

Next steps:
A sandbox for IPRx

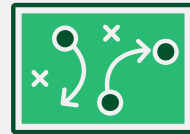


Prospective Phase 3 - Sandbox to scale, up-scale out



IP jurisdiction and industry engagement

- Key challenges to solve
- Co-design



Switch from R&D to BAU

- Solve a wider problem set
- Away from “happy path”



Solve industry challenges

- Outcome focus



Pressure test in a sandbox environment

- Develop IPRx in real world circumstances



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