



Australian Government
IP Australia



Patents



Trade Marks



Designs



Plant Breeder's
Rights

CWS/6

IP Australia's Blockchain Initiatives

Michael Burn

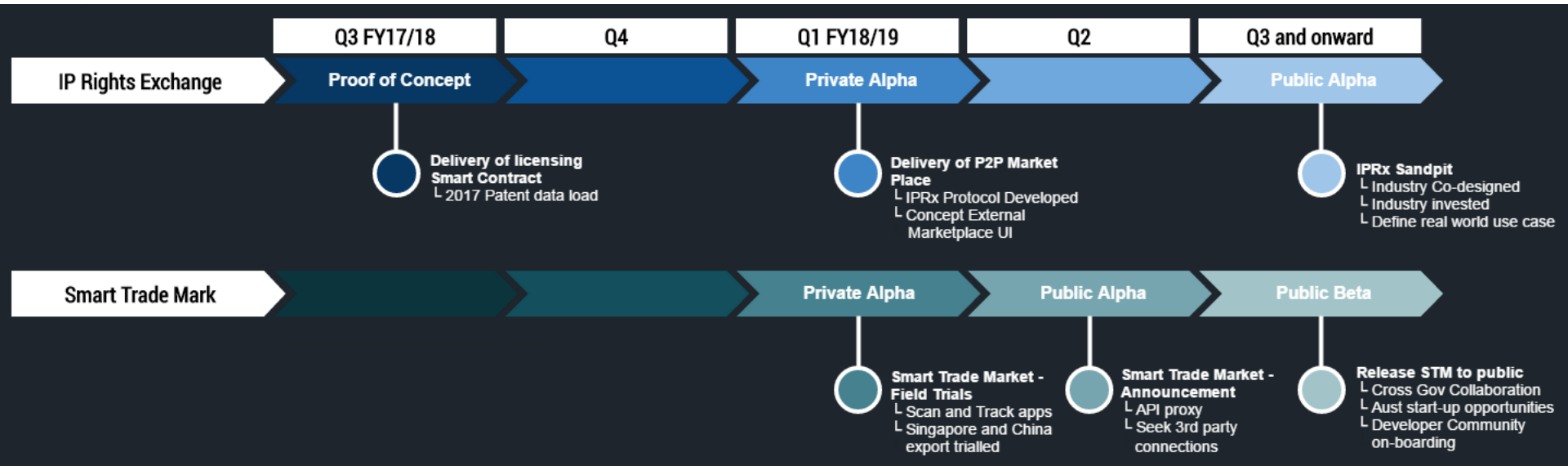
Innovation & Technology Group

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Blockchain Discovery



What we are doing and why

- Have a commitment to exploring emerging technology.
- Look at ways to bring new value to our customers.
 - Better understand disruptors to reduce risk.



IP Rights Exchange



The screenshot shows the homepage of the 'patented' IP marketplace. At the top, there is a navigation bar with 'Marketplace', 'How it works', and 'Contact' links, and a user profile for 'Timothy Reginald III'. The main banner features a background image of solar panels and the text: 'Welcome to the world's first IP marketplace. Tailored to Renewable Energy & Sustainable Technology'. Below the banner, there is a 'Popular Categories' section with icons for Solar, Wind, Hydro, Geo-thermal, Biofuel, Turbines, Agriculture, Transport, Automation, Engines, Mining, and Recycling. At the bottom, there is a search bar with the text 'Search by Patent No, WIPO No or Name' and a note: 'You can also search by: Applicant, Inventor, Agent Name, Patent No, WIPO No, PCT number'.

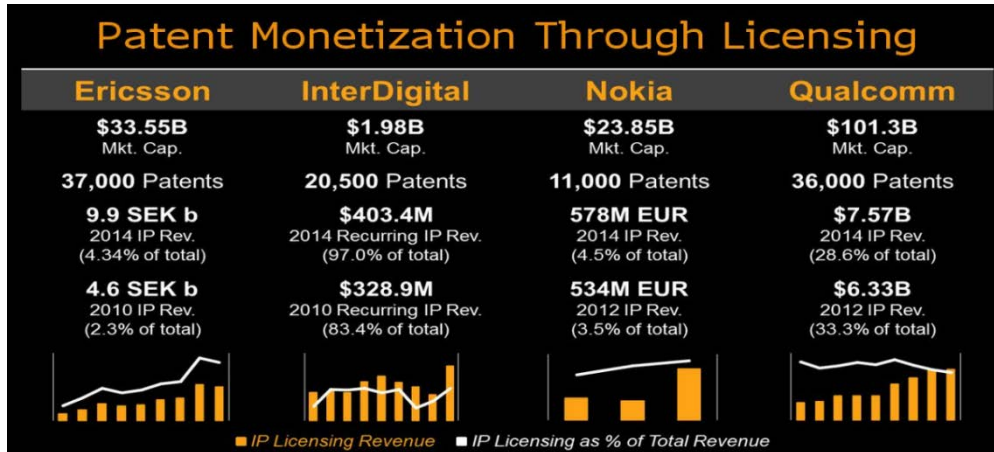
- New ways to commercialise through licensing
- Decentralised network of Patent licencing marketplaces
- Greater understanding of IP Right value
- Greater ease of licencing



IP Rights Exchange – Why Licencing

- IBM, and Texas instruments were among the first to break US\$1B in annual patent royalty revenues.
- Qualcomm has consistently generated industry leading patent licensing revenues currently running at more than US\$6.6B per year.
- Nokia reported US\$643M in patent licensing revenue in 2012 before divesting their handset business to Microsoft.
- Microsoft and Ericsson have been reported at licensing revenue of more than US\$2B per year.

Trends In Technology IP Licensing – Terry Ludlow , Chipworks (2014)



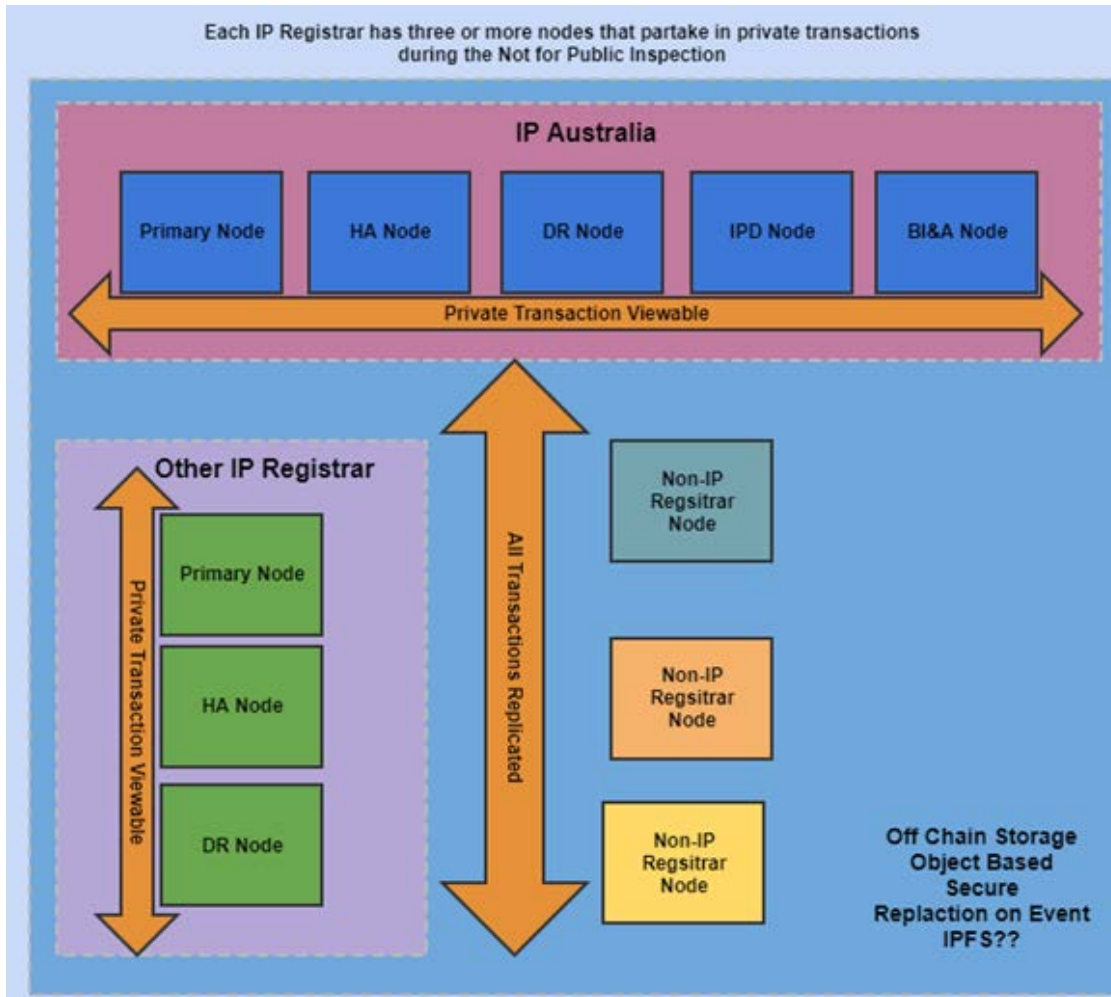
Trends in royalties and licensing - Bloomberg Intelligence (2015)



Microsoft Patent Licensing Program



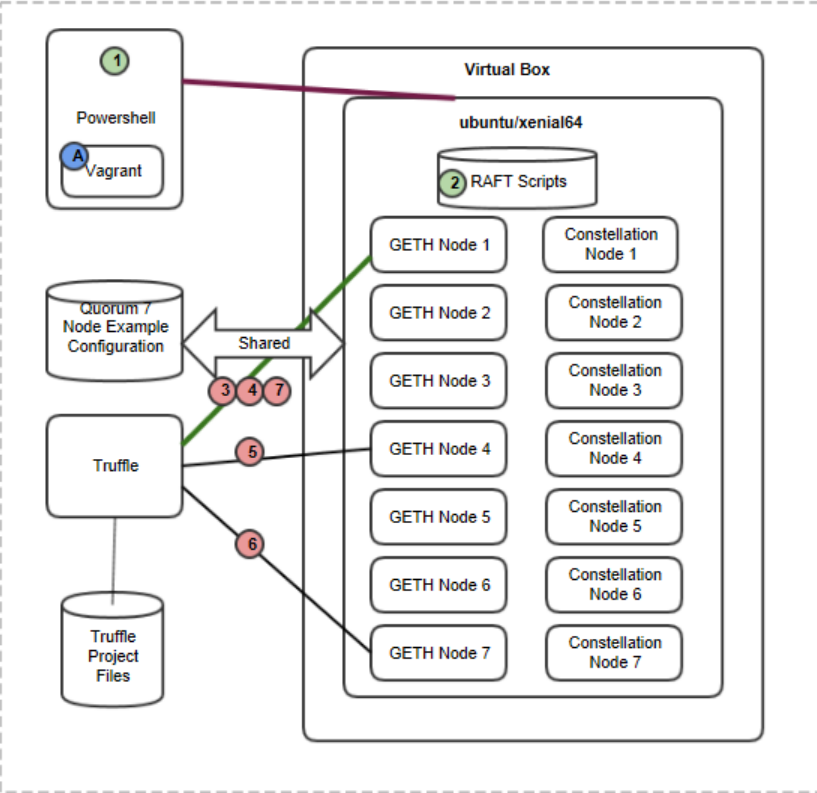
Legal Status Data POC



- Incorporation of Legal Status data into a Quorum Blockchain
- Leverage ST.27 Standards and Task Force work for on chain data



Why Quorum



See applications for more detail

<https://github.com/jpmorganchase/quorum/wiki/Transaction-Processing>

Blockchain component

- Permissioned
- Consensus

Private Transaction Process Flow

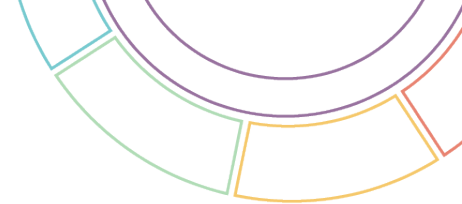
Below is a description of how Private Transactions are processed in Quorum:

The diagram shows the flow of a private transaction across three parties:

- Party A:** Initiates a transaction (1. Private Tx AB) through a Dapp. The transaction is stored (2. TxPayloadStore) and hashed (6. Tx Hash). It is then sent to Quorum Node A via the Ethereum protocol (7. Ethereum Tx). Node A sends a request (9. TxPayloadRequest) to Transaction Manager A, which returns a response (4&11. Tx Response) and an encryption request (3&10. En/decryption request) to Enclave A.
- Party B:** Receives the transaction (8. Block w/ Tx AB) and sends it to Quorum Node B via the Ethereum protocol (7. Ethereum Tx). Node B sends a request (9. TxPayloadRequest) to Transaction Manager B, which returns a response (11. Tx Response) and an encryption request (10. En/decryption request) to Enclave B.
- Party C (Not Party to Tx AB):** Receives the transaction (8. Block w/ Tx AB) but does not have the payload. Node C sends a request (9. TxPayloadRequest) to Transaction Manager C, which returns a response (10. TxPayloadResp (Tx Not Found)).

- Provide publishing from Open for Public Inspection state
- All Permissioned member network can view and see

Conceptual Blockchain Task Force work plan



No.	Action	Expected Result	Planned Date
1	Invitation to member states for participation	IP Office representatives join Task Force	December 2018
2	Establish membership of Task Force	Establish wiki space for all participants	January 2019
3	Review current IPO blockchain activities	Establish possibilities of using blockchain across IP Rights	February 2019
4	Develop questionnaire on IPO developments in use of and experience with blockchain	Collect and assess information on IPO developments in and use of blockchain	March 2019
5	Review and consider current state of blockchain standards in Industry	Establish suitability to leverage industry standards and applicability to IP	May 2019
6	Review and understand blockchain reference architecture	Build understanding and basis for creation of new WIPO Standard on blockchain	July 2019
7	Agree components of reference architecture requiring standardisation	Obtain guidance framework for elements to be incorporated in Standard development	TBA / Task Force meeting
8	Consider draft standard structure	Develop draft standard format, structure and inclusions	TBA / Task Force meeting



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Questions

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