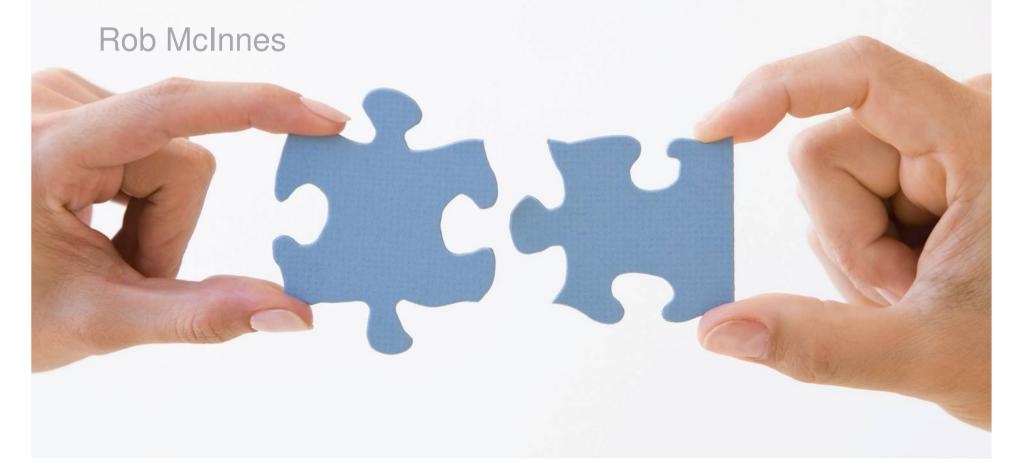


Creating and Maintaining an IP- Savvy Culture in your Organisation



Structure of the Presentation



- Why does IP matter?
- Why does IP matter to CRCs?
- Managing IP in CRCs day to day
- Commercialisation/utilisation pathways
- IP management issues on wind-up of a CRC (if time)

Why Does IPMatter?



- The IP component of value in goods is increasing
- IP is how competitive advantage is sustained in the knowledge economy
 - Other barriers are falling away as trade is freed, labour is more mobile, capital is less rationed and customers have more access to information
- IP is a tradeable asset in its own right
 - As businesses move away from in-house R&D towards outsourcing and in-licensing
 - As "virtual integration" increases
 - "NPEs" exist solely to enforce patents
 - Defensive patent pools
 - Patent auctions/patent licences as tradeable instruments

IP is **Big Money**



- Apple/Microsoft/RIM paid \$4.5Bn for Nortel's 17,000 patents
- Google paying \$12.5Bn for Motorola, with the stated aim of expanding its patent portfolio
- Top brand values start at \$70Bn for Coca-Cola

IP Matters to Markets



- US hedge fund Starboard Value with a 5% stake in AOL was "troubled that AOL remains closed-minded to alternative value creation initiatives".
- CEO of Starboard Value said AOL's assets "are being undervalued in the marketplace". Specifically, said AOL was not taking advantage of a portfolio of over 800 patents it holds for various internet technologies.
- "A significant number of large internet-related technology companies may be infringing on these patents," ... AOL's patent portfolio "could produce in excess of \$1 billion of licensing income. The company's inaction is alarming given our understanding that many of the key patents have looming expiration dates over the next several years which could render them worthless if not immediately utilised."
- AOL then sold to Microsoft ~800 patents for >\$1 Bn

What's Special About IP?

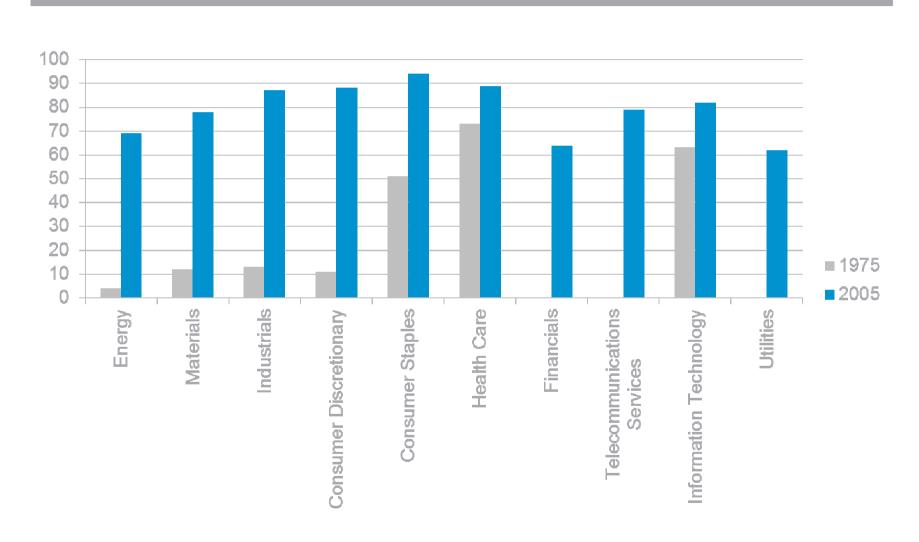


- Capital markets and investment analysts increasingly focus on intellectual assets
 - 80% of the value of the S&P 500 companies (not just high-tech companies) was attributed to intangibles in 2005, up
 from 17% in 1975
- There's more IP around
 - < 1million patent applications in 1985 to > 2 million in 2010
- Patents cover more than they did 20 years ago
 - But the pendulum is swinging back

More than Just High Tech



(intangibles as % of market cap, S&P 500)



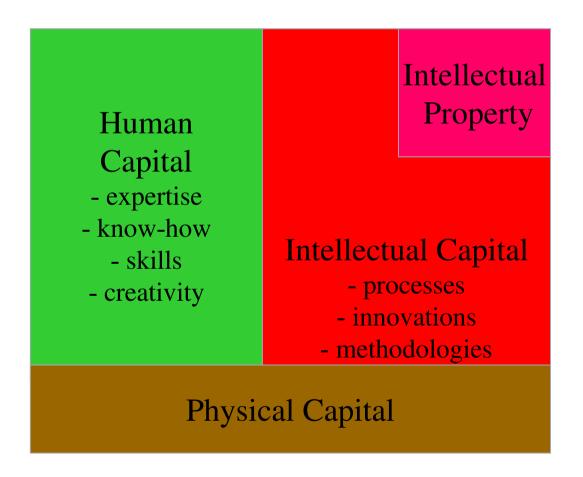
How Does IP Add and Create Value?



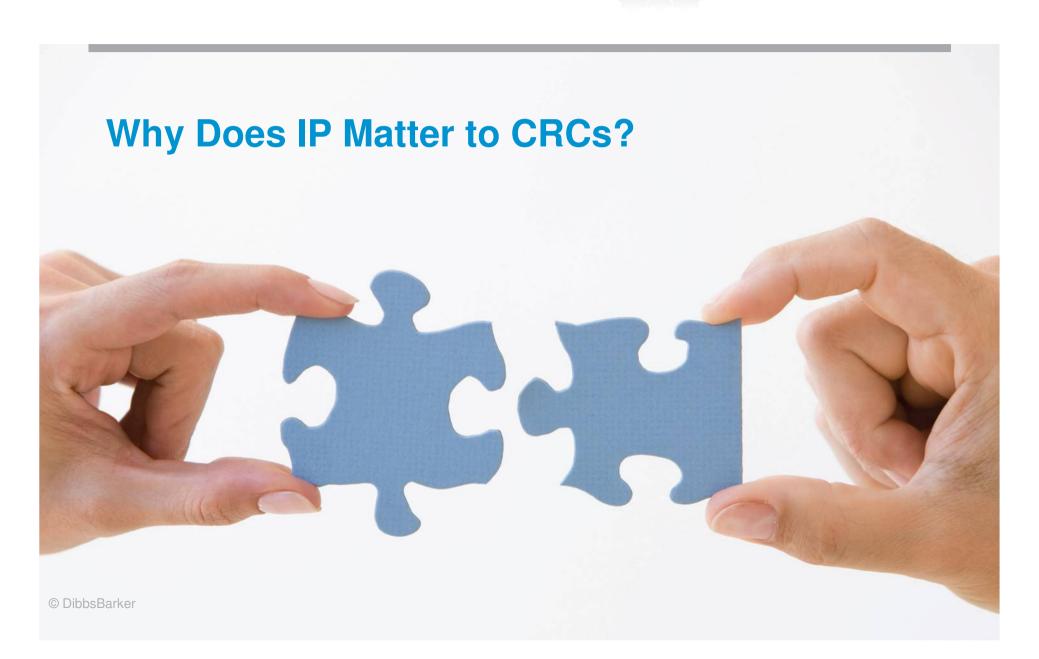
- Inhibits competition against a business' existing products
- Helps extract value from technologies not used in products sold directly
- Allows technologies to be acquired with some assurance of value
- Supplies trading currency when rights conflict
- Codifies the company's knowledge both internally and to investors

IP Within an Enterprise









CRC Program Objective



- The objective of the Program is to deliver significant
 - economic,
 - environmental and
 - social
- benefits to Australia
- by supporting end-user driven research partnerships between publicly funded researchers and end-users to address
 - clearly articulated,
 - major challenges
 - that require medium to long-term collaborative efforts

Success So Far – Specific Deals



- Vision CRC: O2Optix and Night & Day® contact lenses, >\$10M p/a royalties
- G2 Therapies (Asthma CRC): Licence to Novo Nordisk \$102M for anti-inflammatory antibody therapies
- Composites CRC: Hawker de Havilland wins \$4Bn contract with Boeing for the 787

But the Guidelines Stress:



- reinstatement of *public good* (social and environmental benefits) as a key objective of the CRC Program (2008 Guidelines under Labor)
- Medium to long term end-user driven collaborative research
- an end-user-focused education and training program at least including, but not limited to, a PhD program
- global research and education engagement, particularly co-investment arrangements
- small or medium enterprise strategies that build their innovation and/or R&D capacity
- utilisation activities to deploy research outputs and encourage take up by end-users;
- encourage participation from all industry and community sectors and all research disciplines including *humanities*, arts and social sciences

What is "Utilisation"?



- Technology transfer and take-up and use of research outputs by end-users
- "Commercial" utilisation includes:
 - the manufacture, sale, hire or other exploitation of a product or process, or
 - the provision of a service, incorporating CRC Intellectual Property, or
 - licensing of any third party to do any of those things, or
 - otherwise licensing or assigning the CRC Intellectual Property
- Which suggests there is "non-commercial" utilisation

So Where Does This Leave "Commercialisation"?



- Does "public good" mean that IP doesn't matter?
- Does "utilisation" mean avoiding granting exclusivity?
- Is it wrong for one company to make all the money?
- Implications of preferring Australian SMEs
- Why can't we just publish everything?
 - In some industries, no patent = no product
 - "Open source" depends totally on IP

Role of IP in the CRC Program



- Commonwealth Agreement:
 - The Recipient must *ensure* that *any* Utilisation of the Intellectual Property in Agreement Material: (i) maximises the national benefits accruing to Australia; (ii) is consistent with the objective of the CRC Program; and (iii) is consistent with this Agreement
 - The Recipient must ensure that any Utilisation of Intellectual Property in Agreement Material, including by any third party, is consistent with the nature of the Activities and the purpose of the Commonwealth Funding, and undertaken in accordance with the utilisation milestones
- Objectives of CRCs include:
 - to enhance the transfer of research outputs into commercial or other outcomes of economic, environmental or social benefit to Australia
 - to improve efficiency in the use of Australia's intellectual and other research resources

Centre Agreements and IP



(working from the Commonwealth templates)

- New objectives list includes "as an ancillary and supportive purpose, [to] Utilise Centre IP in such a manner as to ensure that the maximum benefit accrues to Australia, including Australian industry, the Australian environment and the Australian economy generally"
- Centre IP (CIP)
 - Developed as a result of the CRC activities
 - Beneficial Ownership to the CRC company or shared according to Contributions, depending on tax status
- Project Agreements set out detail for individual projects (sometimes)

Background IP



- Must be identified by the contributing party (including all constraints)
- Participants give warranties of title etc.
- CRC must maintain a register of BIP
- Previous template: BIP must be licensed as determined by the Board if required for the commercialisation of CIP (subject to arbitration)
- Current template reverts to the 1990s: BIP will be contributed on "reasonable terms to be agreed", but no enforceable obligation

Centre IP



- Historically owned beneficially in shares according to Contributions
- Tendency now for CRC company to own beneficially
- Each CRC Participant may use CIP from projects in which it has been involved, for non-commercial CRC activities
- No Participant may commercialise CIP without a licence from the CRC
- Participants/Project Leader must identify all CIP
- Board of CRC company decides on commercialisation of CIP
- Previous template: CEO decides on IP protection strategy
- Current template: Board decides





IP Rights - Registered



- Patents for inventions
- Registered Designs for 3-D articles
- Registered Trade Marks for brands & logos
- Plant Breeders Rights for varieties

IP Rights - Unregistered



- Copyright for literary & artistic works (including software, databases)
- Confidential Information & Know How
- Circuit Layouts

Project Planning Should...



- Filter projects by IP and market as well as technical criteria
- Institutionalise IP acquisition in the development of new products and processes
- Raise the question of how protectable the new product or process will be
- Analyse at an early stage the avoidance of infringement of third party rights
- Require consideration of in-licensing technology rather than developing it in-house

Different IP Business Strategies



- Comprehensive product protection by building mutually reinforcing bundles of rights including patents, designs, copyright and brands
- Placing roadblocks in competitors' paths
- Generating cross-licensing currency to deal with blocking rights of third parties
- Building value for market perception
- "Fit" with technology/IP deficits of prospective licensees

Why Maintain an IP Register?



- It's a legal requirement
- For Background IP:
 - It identifies what a participant has contributed
 - It identifies any constraints on title or use
 - It enables a contributor to be rewarded.
 - Licensees of CIP will want to know about it.
- For Centre IP:
 - It identifies your CRC's workproduct
 - What can't be reported can't be managed
 - What isn't protected can't be commercialised

The Process of Registration



- BIP registration depends on the contributor, but the CRC needs to extract all required information
- Pro-active audit by CRC management/ external service providers
- Self-executing processes for:
 - Regular reporting on each program and project
 - Milestone and final reporting
- Define projects, plans and milestones by expected IP outcome, not just scientific outcome

Tips for Effective Reporting



- Explain the reason for the requirement
- Use non-legal terms where possible
 - Not "did you conceive and/or reduce to practice a patentable invention..."
 - Not "copyright work" or "artistic work" when you mean software
 - "Background IP" concept needs explanation
- Training to facilitate understanding of the difference between a scientific outcome and legally protectable IP

Fields in an Effective Register



- For patentable inventions/designs:
 - Inventors/others involved; project; timeline; nickname; filing details; prosecution status; BIP prior art; assignments; third party input
- For other IP:
 - Creators/authors; when created; project; confidentiality/ other agreements; assignments; third party input
- Specific to Background IP:
 - Ownership; restrictions; use in projects/commercialisation
- Commercial matters:
 - Planned commercialisation; possible licensees; third party IP desirable for combination; search results

Third Party IP



- Issues with IP:
 - Licensed in by a nonparticipant, or a participant who doesn't want it to be BIP
 - Assigned in, eg by a consultant
 - Required for commercialisation of CIP
 - Infringed!

Strategies:

- Licensed third party IP should be listed in the CRC's IP register to ensure obligations are met
- Note requirements for written assignments
- Projects should be designed with third party blocking IP in mind
 - for potential licensing in
 - To avoid infringement

Current Commonwealth Agreement



- The Recipient shall ... have in place and adhere to documented procedures to ensure that, before any Agreement Material is published or disclosed to any person ... consideration is given to the potential prejudice to the subsistence or Utilisation of the Agreement Material, including the possibility that publication or disclosure might preclude the grant of a patent or cause the loss of Intellectual Property
- The Recipient must use its best endeavours to ensure Utilisation of any Agreement Material ... by End-users
- "End user" means a person, organisation, industry or community capable of deploying the research Outputs of a CRC to deliver economic, environmental and/or social benefits to Australia





Optimum Model for Commercialisation?



- Who's asking?
 - research Participant?
 - commercial Participant?
 - CRC staff?
 - the taxpayer?
- My preference:
 - licensing to the existing company best placed to create a product/service and get it to customers
 - to existing participants?
 - to a NewCo for stand-alone IP?

CRC Program Guidelines –Who Utilises?



- Responsibility for the protection and exploitation of the IP should rest with the participant organisation (end-user, university, publicly funded research agency or the CRC) that has the greatest capacity for this
- Increasing demands by individual Participants for automatic licensing of CIP

License Out, or Create a Start-Up?



- License if:
- Obvious or logical fit with an existing industry collaborator or licensee
- Incremental or dependent technologies
- Insufficient resources to deliver a product to the end user
- Low ongoing interest or engagement
- Multiple applications of the IP in distinct industries
- Mature, low growth market, and the IP will help a licensee increase market share

Start-Up if:

- Likely to attract a high valuation from investors, and an exit opportunity will arise in the medium term
- Disruptive technology not well understood by incumbents.
- Entrepreneurial researchers keen to pursue the spin-off route
- IP is know how/show how or proprietary materials that may be difficult to licence
- Can be a trading business in a few years, or development of IP is accepted as part of the value chain

Making the Choice



- Case-by-case decision whether to license, or spin off a company
- Spin-offs that generate "huge" value are "rare, unplannable and usually about 20 years in gestation" (DEST Report)
- Accept that few projects have the scale or marketreadiness to satisfy formal VC risk-return requirements
- Many spin-offs are not of the externally-funded, hightech start-up variety

Questions Investors/ Licensees Will Ask



- What technologies and intellectual property rights fall within the portfolio of intellectual assets that are being commercialised?
- Does the CRC own those intellectual property rights or if it does not own them, are the owners of those rights able to grant to the company sufficient rights to commercialise them?
- How likely is it that those intellectual property rights will proceed to registration (in the case of pending applications) and are valid (in the case of granted rights)?
- Does the company have reasonable freedom to practise those intellectual property rights and to commercialise those technologies?

Does the CRC Own the Relevant IP?



- Check CRC IP registers against public databases
- Check project records
- Is any "Centre" IP really Background IP?
- Is any know-how or show-how required? Records for IP prosecution or regulatory approvals?
- Any other IP that needs to be 'bundled' with the IP already identified?
- What warranties does the NewCo or licensee get from Participants?
- Do any Participants have a UWA v Gray problem?

University of Western Australia v Gray



- Prof Gray employed from 1985 to foster research at UWA
- Federal Court distinguished a "duty to research" from a "duty to invent"
- UWA did not own inventions resulting from Dr Gray's research
 - UWA did not have the contractual power to prevent Dr Gray from publishing
- Regulations under UWA's statute ware ineffective
- Probably limited to universities/public sector

Validity and Freedom To Operate



- Patentability searches don't say much about FTO
- Typically under-analysed in public sector research environments
- Worth further consideration when turning a research project into a business opportunity
- Do an IP Landscape analysis

IP Landscape



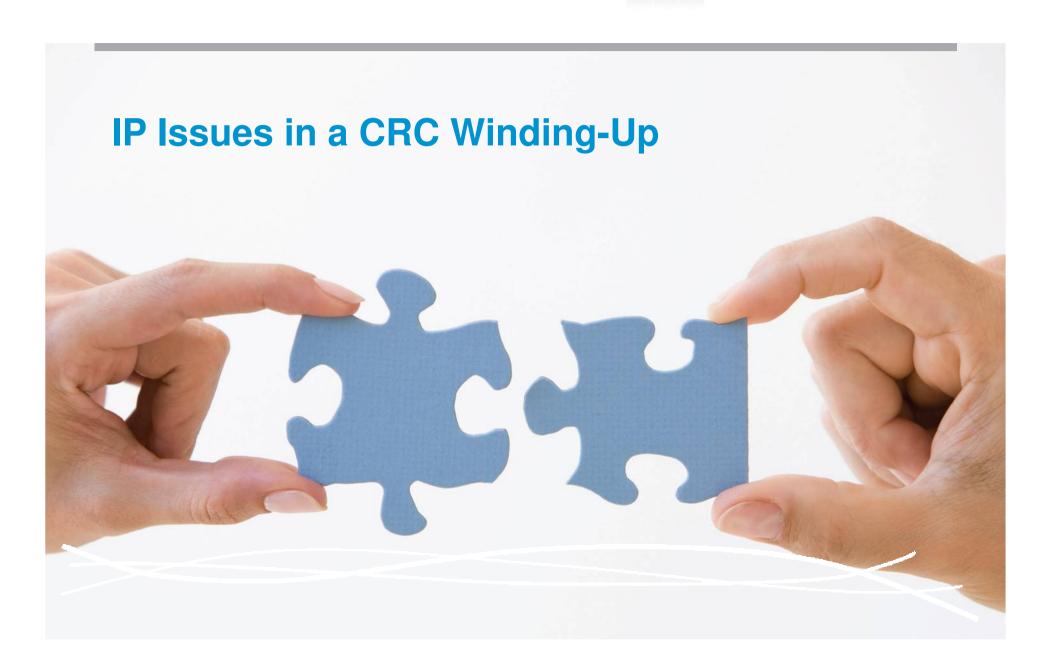
- To inform business strategy development and R&D planning
- For competitor intelligence
- To understand the technology and IP position of prospective licensees/collaborators
- To determine what is available to in-license
- To look for strategic and blocking IP opportunities

Contractual 'Freedom to Operate' Issues



- Can the NewCo and/or licensees exercise sufficient rights in the IP?
- Have any prior licences/options etc been granted?
- Care with defining "research rights"
- Terms of BIP licences may impact
- Will the ex-Participant shareholders/BIP licensors expect first option to commercialise?
- Do we build in an Australian preference?





Content: Wind-ups



- What do the Guidelines say?
- What do the template agreements say?
- Commercialisation and utilisation options on wind-up
- Some implementation issues, from a third party due diligence perspective
- Case study: CRC Sugar => Sacron Innovations

Objectives of the Wind-up Strategy



- To ensure that the CRC:
 - fully meets its obligations under the terms of its Commonwealth Agreement;
 - fully meets its obligations in terms of agreements between participants (eg. Centre/Participants Agreement) and with external organisations;
 - has in place mechanisms to protect the interests of its participants,
 staff and students
- Issues to be considered include "the future of research, commercialisation/utilisation and education and training activities"

Guidelines - IP



- The IP must be distributed in a way that maximises the benefit to Australia in compliance with the arrangements specified in the CRC's Commonwealth Agreement.
- Where the IP has no tangible commercial potential, research results must be disseminated to appropriate parties to ensure effective transfer of technology and utilisation of research in compliance with the Participants Agreement.
- An intellectual property register is to be provided and is to include:
 - each item of Intellectual Property created during the grant period;
 - the proposed ownership arrangements of intellectual property after the wind-up of the CRC; and
 - The rationale for the arrangements

Guidelines – IP (cont)



- "The CRC must ensure that structures and procedures are put in place prior to the end of the grant period, to ensure the ongoing management of the CRC's intellectual property including any assignment for commercialisation or further development and distribution of any commercial returns"
- [The wind-up plan] "must also detail the planned future of any incorporated entities controlled by the CRC, such as management companies and IP holding vehicles"

Commercialisation/ Utilisation



- The plan must identify the commercialisation and utilisation activities that will be:
 - completed or terminated at the end of the grant period;
 - continued by participants on a cooperative basis beyond the grant period; and
 - transferred to a participant or other organisation for further development and future uptake by end-users (including for commercialisation).

Wind Ups - Commonwealth Agreement



- CRCs must prepare and provide, to the satisfaction of the Commonwealth, a comprehensive and detailed Wind Up Plan for the orderly exit from the CRC Program in accordance with any relevant Guidelines
- On termination the Commonwealth is entitled to recover any Commonwealth Funding which has not been spent, or legally committed for expenditure by the Recipient and payable by the Recipient as a current liability (written evidence of which will be required), by the date the Recipient receives the notice of termination

Different CRCs have Different Starting Points



- Centre IP owned jointly by all Participants
- Centre IP legally owned by CRC Company but held in trust for the Participants – Board of the CRC Company may make commercialisation decisions
- Centre IP legally owned by CRC Company but held in trust for the Participants – unanimous consent required for commercialisation decisions
- Centre IP legally and beneficially owned by the CRC Company

What Models Exist?



- Centre IP? What Centre IP?
- Free for all (among participants)
- Nominated Participants to own and commercialise individual items of IP
 - for own operations?
 - by licensing, and keep proceeds?
 - by licensing, and distribute proceeds?
- CRC Company to continue?
- NewCo to be formed?

Case study: CRC Sugar => Sacron Innovations



- NewCo set up, shares to Participants
- Independent Board and Chair
- Key IP assets transferred
- Seed funding supplied
- Obligations of the CRC to be honoured



Any Questions?



Rob McInnes
T +61 2 8233 9556
E rob.mcinnes@dibbsbarker.com

