

UWA'S MICROSPHERES LITIGATION: FAR FROM THE IDEAL OF 'INCENTIVES, HARMONY AND CERTAINTY' COEXISTING IN COMMERCIALISED UNIVERSITY RESEARCH

MARY WYBURN[†]

UNIVERSITY OF SYDNEY, AUSTRALIA

This paper examines the development of the microsphere technology, its long and difficult path to commercialisation and the litigation over its ownership. The decision of the full Federal Court to reject the claims of the University of Western Australia to ownership of the intellectual property in the microsphere research undertaken by Bruce Gray and his research team is controversial, in particular its application of the general law implied term in contracts of employment. The paper explores the central litigation, both at first instance and on appeal, what the courts had to say about the ownership of patent rights generated in these circumstances and the extent to which the judgments have more general application across the university sector. The litigation presented a situation that was far from the ideal envisaged by Justice French at first instance, of 'incentives, harmony and certainty' coexisting in commercialised university research.

I INTRODUCTION

The research was all about saving lives, treating liver cancer by using microspheres injected into the bloodstream to target the affected organ. One form of the technology transported radioactive material (SIR-Spheres (Selective Internal Radiation)), another carried anti-cancer drugs (DOX-Spheres) and yet another delivered magnetic material that was then heated by an external magnetic field (Thermo-Spheres). After many years of development, there was potentially a lot of money to be made but several individuals and organisations were disputing its ownership. It was far from the ideal situation, described by Justice French in his first instance judgment, where 'incentives, harmony and certainty'¹ coexist in commercialised university research. Instead, there was evidence of long running disputes between academics in the same faculty over competition for research funding and the ownership and use of laboratory equipment; a dispute about which members of the research team invented what technology; and substantial litigation between a university and the commercial vehicle established to exploit the technology.

This paper examines the development of the microsphere technology by Bruce Gray and his research team, the long and difficult path to its commercialisation and the legal disputes arising along the way. It explores the main litigation about ownership of the intellectual property rights, in particular patent rights, in the research, both at first instance² and on appeal³ and the court's ultimate rejection of the University of Western Australia's (UWA) claims. The paper then examines some of the key issues the case raises for the management of intellectual property in universities.

[†]Address for correspondence: Mary Wyburn, Business Law, Faculty of Economics & Business, University of Sydney, Sydney, NSW 2006, Australia. Email: mary.wyburn@sydney.edu.au

II BACKGROUND

Bruce Gray's work using microsphere technology in targeting anti-cancer treatment to the liver began in the early 1980s while he was at Melbourne University. His work there involved SIR-spheres delivering radiation therapy to the cancerous liver.⁴ The results of Gray's first studies using the technology were published in 1983⁵ and the first microspheres were manufactured in 1983/4.⁶ During this time some preliminary work was undertaken by Gray and his research team on using the microsphere technology to deliver anti-cancer drugs (eg, doxorubicin) to the liver (DOX-Spheres), as well as microspheres carrying ferromagnetic material to the liver tumours, which was then to be heated through the use of external alternating electro-magnetic fields (Thermo-Spheres).⁷ Human trials of the SIR-Spheres were about to take place when Gray was successful in his application for a chair at UWA and so they did not proceed. Instead, Gray moved his research work to UWA. He took up the UWA chair of surgery at Royal Perth Hospital (RPH) in January 1985,⁸ with UWA paying 70 per cent of his salary and 30 per cent being paid by RPH.

On Gray's arrival at UWA, he and his research team continued with the microsphere research, including applying for multiple grants for equipment and for other research activities, including collaborative research with organisations such as the CSIRO.⁹ A series of academic papers, with multiple authorships involving various members of the research team, about particular aspects of their work, were published over this early period. Animal trials of the SIR-Spheres took place from an early stage and human (clinical) trials commenced in November 1986.¹⁰ In 1986 Gray's team also commenced work on the Thermo-Spheres.¹¹

At the time Gray was appointed, UWA was only just beginning to put in place appropriate mechanisms to deal with intellectual property generated by its staff. There had been some earlier efforts to establish processes by which intellectual property generated from research taking place at UWA could be managed and commercialised. The UWA patent regulations, 1971, came into effect no later than 1975.¹² Under the regulations a patent committee was established to advise the Vice-Chancellor in relation to inventions created at the university.¹³ The regulations recognised that 'seek[ing]' patentable inventions was not part of UWA policy but inventions might be created during research activities and they should be patented 'to safeguard the interests of the University and the inventor in a manner consistent with the University's obligations to the public'.¹⁴ The regulations obliged persons to disclose 'any patentable invention made or developed wholly or in part during the course of that person's duty or whilst using the University's research facilities' and to assign his or her rights to the university if it decided 'to exercise its rights in the invention'. The inventor was entitled to a specified share in the proceeds from the university's exploitation of the invention (regulations 6-9) but the university senate was free to enter into 'a special arrangement' with the inventor on different terms (regulation 11). In November 1976 Uniscan Ltd was incorporated by UWA on the recommendation of the patent committee, to facilitate the development of a particular project (a graphic display system).¹⁵ In April 1983 UWA established a Centre for Applied Business Research (CABR) as an administrative unit to operate in conjunction with Uniscan and to take an active role in the development of intellectual property created at the university.¹⁶ An intellectual property unit was set up within CABR in 1984.¹⁷

However, despite the efforts of some UWA administrators, according to the evidence in the microsphere case, by 1986, within a year of Gray's appointment, the intellectual property policies and practices of UWA were 'in a state of disarray'.¹⁸ In order to help remedy the situation the position of Deputy Vice-Chancellor (Research) (DVCR) was established in May 1986 but not filled until April 1987.¹⁹ Soon after his appointment as the first DVCR, Robert Parfitt was approached by Gray and they discussed his research work.²⁰

But even before Parfitt arrived, Gray was aware of the commercial potential of his work. In 1986 he had met with the director of CABR (Ian Nicholas) and discussed the three microsphere projects.²¹ In 1987 Gray provided CABR with a more detailed proposal about the SIR-Spheres research and its commercialisation and a separate proposal to advance the DOX-Spheres research.²² It was agreed between Nicholas and Gray that CABR would seek advice from patent attorneys about the patentability of aspects of the DOX-Spheres and Thermo-Spheres technologies.²³ A draft provisional patent specification for the Thermo-Spheres technology was prepared by the patent attorneys.²⁴ Gray and Nicolas approached a potential commercial partner and a government agency seeking further funding for Gray's research. Other commercial entities made approaches to UWA and Gray in response to publicity about Gray's work.

But UWA had now apparently changed its mind about its strategy for managing intellectual property emerging from its staff's research. By July 1988, its policy of operating Uniscan and CABR, essentially at arm's length from the university, was no longer pursued. The operations of these agencies began to be drawn back under more direct UWA management, in particular under the DVCR.²⁵

Meanwhile Gray continued to work in conjunction with Uniscan to further develop the microsphere technologies. In 1988 a feasibility study was undertaken by CSIRO into the Thermo-Spheres technology²⁶ and Uniscan was directly involved in the contract arrangements. The contract was made between Uniscan and CSIRO and it provided for joint ownership of any intellectual property arising from the study.²⁷ During this period Uniscan also arranged introductions for Gray to various potential commercial partners in the hope that they would fund the development of the Thermo-Spheres technology. Unfortunately, none of these contacts led to an arrangement for commercialisation. Uniscan then began rationalising the projects under its control and in July 1988 it indicated to Gray it was not proceeding with the DOX-Spheres technology.²⁸

Even though these initial attempts to attract commercial interest in the technology failed, Gray still appreciated the need to protect the intellectual property generated by his research work. In September 1988 he lodged a provisional patent specification (PJ0371- 'Targeted hysteresis hyperthermias for the treatment of cancer'), in his own name.²⁹

By the end of 1989 UWA was again trying something new in its management of intellectual property. In conjunction with the three other Western Australian public universities, it appointed Technology and Innovation Management Pty Ltd (TIM) to provide intellectual property consultancy services to UWA, instead of Uniscan and CABR.³⁰

For his part, Gray's SIR-Spheres research was progressing and from 1989 into the early 1990s there were several academic papers, with multiple authors from the research team, published on the results of the clinical trials.³¹ Clinical trials were undertaken at RPH and QEII Medical Centre. Further funding for trials was obtained from the National Health and Medical Research Council.³² From the early 1990s, the SIR-Sphere treatment of patients with liver cancer developed by Gray and his team was taken up in hospitals in Hong Kong and New Zealand.³³ In September 1989 Gray's team was expanded when Yan Chen came to work on the DOX-Spheres and Stephen Jones on the Thermo-Spheres.³⁴ In late 1989 Gray also began to work with Christopher Berndt at Monash University's Department of Materials Engineering on developing a hollow Yttrium microsphere (SIR-Spheres).³⁵

Gray's microsphere research was progressing in the 1990s despite a background of increasing conflict for him within UWA. Gray thought the source of much of the conflict was the support his work began to receive from some within the Lions Club in Western Australia. In 1990 Gray's

work with the Lions Club on screening women for breast cancer led to plans for the Lions Club to establish a research institute (Lions Cancer Institute (LCI)) at RPH, with Gray as its first medical director.³⁶ Gray had talks at this time with the UWA DVCR and Vice-Chancellor, who were both supportive of the early plans.³⁷ However, some UWA researchers viewed the LCI as a potential competitor for public research funds. Among them was Anthony House, then head of the UWA department in which Gray was employed (Department of Surgery). House wrote to the Vice-Chancellor raising concerns about the LCI interfering with Lions Club funding to the Lions Eye Institute, Lions Save Hearing and the Australian Kidney Foundation.³⁸ Other senior academics in the Medical Faculty were also opponents of the LCI.

Notwithstanding this opposition, the LCI was incorporated on 25 January 1991 with Gray as its Medical Director and Mark Burton, a member of Gray's research team, as its Scientific Director.³⁹ The main focus of the LCI was Gray's microspheres technology.⁴⁰ At the same time a group of individuals, not associated with the Lions Club, incorporated another entity, the Friends of the Cancer Institute Inc, on 30 January 1991, with the aim of raising funds for LCI projects.⁴¹ In October 1993 this second entity changed its name to the Cancer Research Institute Inc (CRI).⁴² These entities were later to play key roles in efforts to commercialise the microspheres technology.

In 1993 UWA was once again addressing its intellectual property management policy. In that year a new position of Pro Vice-Chancellor (Research) (PVCR) was created and Uniscan was deregistered.⁴³ The appointee to the position (Michael Barber) arrived in February 1994 and he and others later guided new intellectual property regulations towards the required UWA senate's approval in July 1996.⁴⁴ Under the 1996 intellectual property regulations there was a significant change in approach to staff-generated intellectual property. Except in the case of a special agreement providing otherwise, any intellectual property created 'in the course of the originator's employment with the University' was now to be owned by the university, except for copyright, in which case the university would own copyright in computer programs but not other copyright material (regulation 4(4)). The originator of the material was entitled to a specified share of net revenue from the commercialisation of the intellectual property (regulation 10). However, a failure to formally promulgate the new regulations meant they came into effect no earlier than 30 November 1997,⁴⁵ and it was only then that the 1971 patent regulations were rescinded.

In the period from 1994 to 1999 the commercialisation of intellectual property generated at UWA remained essentially a 'by-product' of the other activities of the university and there was no close monitoring of the intellectual property disclosure obligations of UWA staff.⁴⁶ Indeed, the court found that between 1985 and 1997 UWA had effectively abandoned the patent committee with its essential role of advising the Vice-Chancellor on UWA inventions and it failed to establish administrative procedures for notification to the Vice-Chancellor of inventions generated at UWA as required under the patent regulations.

Despite the problems with UWA's intellectual property management, there were obviously benefits in research centres being associated with the university. This is illustrated by the considerable efforts of LCI (from 1991) to gain formal affiliation with UWA. What LCI had in mind was for it to be a research institute rather than merely a fundraising entity, based initially around supporting Gray and his research.⁴⁷ In 1993 LCI applied for affiliation with UWA but when the application was considered by the executive committee of the Faculty of Medicine and Dentistry, the decision was initially deferred because of a 'turf war' between LCI and the Cancer Foundation of Western Australia.⁴⁸ Gray perceived part of the opposition to the affiliation application, and LCI in general, as coming from the then Dean of the Faculty (James Patterson).⁴⁹

Early in 1993 the level of conflict was such that Burton, a key member of Gray's research team, decided to leave UWA.⁵⁰

At the same time Gray remained vigilant about the need to protect the intellectual property being generated by the microsphere research. On 18 November 1993 Chen and Gray lodged a provisional patent specification (PM2492) ('Controlled release matrix for drugs and chemicals'), naming Chen and Gray as inventors.⁵¹ The invention related to the use of metal ions to control the release of drugs from the microspheres (DOX-Spheres).

In the middle of 1994 Gray began to approach potential investors seeking venture capital to commercialise the microsphere technology being developed through LCI and CRI.⁵² At the same time he was discussing with the newly appointed PVCRC (Barber) these early plans to incorporate a company to commercialise the technology using venture capital.

However, in late 1994 conflict was beginning to emerge within Gray's own research team. When the documentation for the DOX-Spheres patent application, now in the name of CRI, but naming Gray and Chen as inventors, was being prepared, Chen became concerned. She felt that if there was to be any commercialisation of the invention, she should share in the benefits and not be disadvantaged if the patent rights were to be held in the name of CRI.⁵³ At the time Chen sought advice from a firm of patent attorneys.

Negotiations over the terms of the affiliation agreement between LCI and UWA, in particular the inclusion of CRI in the arrangement, took place during 1994 and 1995. One of the contentious issues was the proposed ownership of intellectual property generated by the research. While UWA wanted the proceeds of intellectual property generated under the arrangement to be divided 'as negotiated' between the contracting parties, Gray wished to keep any proceeds generated by commercial contract staff, as opposed to research grant staff, solely in LCI/CRI hands.⁵⁴ The affiliation agreement was entered into at the end of October 1995.⁵⁵ Under the agreement UWA was to be the employer of LCI/CRI staff and all research funding applications were to be made through it. The university was entitled to negotiate a share of the proceeds of intellectual property generated by staff and students funded by grants processed through the university.⁵⁶ The other commercial projects at LCI/CRI were to 'operate with separate agreements which identify interests in the intellectual property, royalties and costs etc'.⁵⁷

III COMMERCIALISATION PLANS

An initial push towards a public fundraising to commercialise the microsphere technology was made during 1995. On 19 April the 'first' Paragon Medical Ltd was incorporated and Gray was appointed its managing director.⁵⁸ This company later transferred its name to a 'second' Paragon Medical Ltd and in 1999 it was deregistered. By the middle of 1995 Paragon Medical Ltd was entering into a confidentiality agreement with ARI, a division of the Australian Nuclear Science and Technology Organisation (ANSTO), in relation to discussions concerning the future manufacture under licence by ARI of the Yttrium microspheres.⁵⁹

In October 1995 Gray wrote to the executive dean of the Faculty of Medicine and Dentistry (Stephen Schwarz) advising him of the formation of Paragon Medical Ltd, that he (Gray) was a director of the company and the intention to use it for raising capital for medical research to be undertaken by CRI.⁶⁰ Gray explained that he would expect to receive 'a financial return' from it '[i]f and when' its operations became profitable.⁶¹ He admitted that if the venture was successful, this could 'impinge on [his] ability to fulfil [his] duties with the University' and stated that at such stage he would tell the university and 'make appropriate arrangements so that the

University's interests are protected'.⁶² The letter was referred to the UWA Vice-Chancellor and advice on it was sought from the university solicitor.⁶³ According to UWA policy guidelines, Gray's directorship of a for-profit company required prior permission but this was not followed up by UWA. The court at first instance found the actions of the UWA Vice-Chancellor amounted to 'either a permission within the terms of the UWA policy or a waiver of its strict application'.⁶⁴

At the time Gray was beginning to develop a commercial structure for the exploitation of the microsphere technology, conflict continued within the Department of Surgery and between medical researchers at the RPH. In order to resolve the continuing conflicts, it was decided LCI/CRI would be reorganised under a new Centre for Applied Cancer Research (CACS), with effect from 1 March 1996.⁶⁵ CACS was established as a collaborative research centre of UWA and LCI/CRI, administratively equivalent to a department in the Faculty of Medicine and Dentistry but it was not a separate corporate entity.⁶⁶ CACS was to undertake the affiliation obligations previously owed by LCI/CRI to UWA. Gray was appointed CACS' Medical Director.

While the new administrative arrangements were being put in place, Gray continued to pursue patent registration for the microsphere research. He lodged a provisional patent application (PN9782- 'Targeted hysteresis hyperthermias as a method for treating cancer')⁶⁷ on 10 May 1996 for the Thermo-Sphere technology⁶⁸ in which he was named as inventor.⁶⁹ An International Regional patent application was made on 21 June 1996 in relation to the SIR-Spheres technology.⁷⁰ From this time Gray also sought to have all the intellectual property rights in work done by students for CRI assigned to CACS/CRI and confidentiality obligations imposed on them.

However, one member of Gray's research team was still concerned to ensure she reaped some of the benefits of the commercialisation for her contribution to the technology. In October 1996 Gray wrote to Chen on CRI letterhead seeking her signature on an assignment of the US patent rights to enable the DOX-Spheres patent application to be lodged by CRI in the USA. In response to a query from Chen about her benefiting from the commercialisation of the invention, Gray indicated that 'as per the original agreement' Chen would benefit if the invention was commercialised but at this stage all that was being done was to ensure appropriate patent protection was in place.⁷¹ Chen signed the necessary documents, including documents relating to a Canadian patent application, in November and December 1996.

In mid-1996 Gray commenced discussions with Nomura/JAFCO (Nomura), a Japanese technology investment joint venture.⁷² This relationship was the breakthrough needed by Gray to progress his research to commercialisation. By the following year Gray was moving from full time to a fractional appointment with UWA so he could direct more of his attention to commercialising the technology. His .3 fractional appointment represented his work at RPH, so from March 1997, although remaining an employee of UWA, Gray was being paid only by RPH.⁷³

The Nomura connection also brought with it a much stricter approach to the ownership of rights in the microsphere technology and raised questions about the chain of title to those rights. Gray was asked to provide confirmation from the organisations he had worked with on the microsphere technology (ie, UWA, RPH, the Chinese University of Hong Kong) that they had no claim to ownership of any of the patent applications. CRI wrote to UWA's PVCRC (Barber) on 17 January 1997 informing him of the negotiations with the third party investor and indicating that it required from UWA a statement confirming it had no claim to ownership of the rights in the technology. The letter asserted that UWA had no interest in the intellectual property connected with the SIR-Spheres and DOX-Spheres and that in relation to the Thermo-Sphere technology, where the researcher involved (Stephen Jones) was nominally on the UWA payroll, all costs of the research had in fact been borne by CRI.⁷⁴ Barber replied by letter on 22 January confirming

‘on the basis of the facts’ in the earlier CRI letter, that in relation to the ‘CRI funded technology’ UWA had no interest in the three identified technologies or its associated intellectual property.⁷⁵ The court was not convinced that Barber’s reply amounted to ‘informed consent’ but it considered Barber’s ‘less than rigorous approach in this respect was consistent with his less than hard line attitude to the enforcement of what he and others thought were UWA’s intellectual property rights’.⁷⁶

Nomura retained the law firm Freehills to act for it in relation to its intended investment in the technology.⁷⁷ The due diligence to be undertaken by Freehills with respect to the intellectual property was to be limited to a ‘basic patent appraisal’ but the risks with such a limited inquiry were to be offset by including in the agreements ‘the broadest possible warranties and representations’.⁷⁸

Even at this early stage in the relationship, Nomura was having a significant effect on the actions of Gray and his associated research centres. On the recommendation of the Nomura representative (Michael Panaccio), Paragon Medical Ltd increased the price it charged to RPH and other hospitals for the SIR-Spheres from \$690 (approximate actual cost) to \$2,800 per dose.⁷⁹ The decision to raise the price had important consequences for Gray.

The decision to charge hospitals more for the SIR-Spheres was made at a time when Gray’s relationship with UWA was deteriorating. In February 1997 the PVCr (Barber) wrote to Gray raising the likelihood of future potential conflicts of interest now the commercialisation of the microsphere technology looked like going ahead and indicating his presumption that Gray had sought approval for his consulting work under the relevant UWA policy.⁸⁰ Gray replied on 5 March, describing his positions at LCI/CRI as unpaid and asserting that he had not received ‘income or other benefit’ from third parties while employed with UWA.⁸¹ However Gray recognised the potential for future conflicts and indicated he was negotiating a change of employment with UWA from full time to a fractional appointment.⁸² Barber’s reply to Gray was that such a reduction would not remove potential conflict.⁸³

In March and April 1997 RPH authorities became concerned about the price increase for the SIR-Spheres. They discovered Gray had an interest in the supplier (Paragon Medical Ltd) and sought legal advice from the Crown Solicitor’s Office about his conduct.⁸⁴ Acting on the advice, a complaint was made to the Western Australian police fraud squad.⁸⁵ On 5 May Deputy Vice-Chancellor Allan Robson wrote to the Anti-Corruption Commission indicating UWA suspected ‘on reasonable grounds’ that Gray ‘has been involved in conduct which may amount to corruption, a crime or serious improper conduct’.⁸⁶ In the middle of 1997 the RPH ethics committee suspended recruitment of patients for Gray’s clinical trials, pending the outcome of the police investigation. In August 1997 the Anti-Corruption Commission asked the DPP whether there was sufficient evidence of Gray committing a criminal offence. The DPP advised that there was insufficient evidence to establish a prima facie case.⁸⁷ On 2 October Barber wrote to Gray about Gray’s attempts to impose confidentiality obligations on PhD students working at CRI and to obtain all intellectual property. Barber considered the confidentiality obligation was ‘appropriate’ but the attempt to obtain ownership of the intellectual property from students ‘unacceptable’.⁸⁸

IV COMMERCIALISATION AGREEMENTS AND PUBLIC OFFERING

As the conflict at UWA was escalating, Nomura and Gray were moving closer to a commercialisation outcome for the microsphere research. Under the arrangements, Paragon Medical Ltd was to change its name to Australian Surgical Products Ltd⁸⁹ and the name of

Paragon Medical was to be transferred to a new corporate entity. The 'second' Paragon Medical Ltd,⁹⁰ later renamed Sirtex Medical Ltd, was incorporated on 21 April 1997.

On 1 May 1997 various agreements were entered into.⁹¹ Under an asset purchase deed the new Paragon Medical Ltd acquired the old Paragon's assets (inventions, patents, know how) in consideration of \$100.⁹² The new Paragon Medical Ltd entered a memorandum of understanding with CRI⁹³ under which CRI was to carry out research for Paragon in return for reimbursement of staff salaries and expenses plus a 30 per cent loading. Intellectual property rights were to be owned by Paragon.

An asset purchase deed provided for Paragon to purchase from CRI the DOX-Spheres patent (PCT/AU94/00708), any interest in patents, know how, intellectual property rights and equipment then held, in consideration of 433,332 B ordinary shares in Paragon.⁹⁴ Included in the deed were representations that CRI owned the assets and no third party had any claim to them and an indemnity in respect of a breach of the representations.⁹⁵ An assignment by Gray transferred the relevant intellectual property rights and other property to Paragon in consideration of \$2,739,990, the price to be satisfied by an allotment of Paragon shares (1,028,33 A ordinary and 341,682 B ordinary shares at \$2 per share).⁹⁶ The assignment contained representations and warranties from Gray and an indemnity in the case of breach.

A subscription and shareholders' agreement between Paragon Medical Ltd, CRI, Gray, Jones, Kevin Karlson⁹⁷ and NJI No 2 Investment Fund (Nomura), ensured assets were transferred from Gray, CRI and the old Paragon to the new Paragon. Various warranties were given by the parties, including warranties about the ownership of intellectual property rights and that no claims or proceedings were threatened or pending.⁹⁸

Alongside the significant steps being taken towards commercialisation, Gray was continuing to deal with controversies on several fronts at UWA. Robson wrote to Gray on 19 November 1997 asserting that in failing to obtain the Vice-Chancellor's approval for his directorship with Paragon Medical Ltd, Gray was in breach of university policies on consultancy work and professional relationships. Robson insisted Gray immediately resign as director of Paragon.⁹⁹ In early 1998 Gray was still insisting all rights in contract research work done by CRI on behalf of Paragon Medical Ltd would be owned by Paragon and before any student accessed any intellectual property owned by CRI, they would be required to sign an agreement protecting such property, including by way of obligations of confidentiality. Discussions with UWA about this issue continued through 1998 and into 1999.¹⁰⁰

In 1998 significant progress was made by the new entity formed with the assistance of Nomura. Approval was obtained from the Therapeutic Goods Administration for the sale of SIR-Spheres in Australia.¹⁰¹ Provisional patent application No PP8998 ('Magnetic material') was filed by Paragon Medical Ltd on 3 March 1999.¹⁰² Patent application No 28952/00 ('Heating of magnetic material by hysteresis effects' Thermo-Spheres-3) was filed on 3 March 2000,¹⁰³ naming Gray, Jones and Raffaele Cammarano¹⁰⁴ as inventors.¹⁰⁵ Paragon Medical lodged provisional application PP9228 ('Production of resin based radionuclide-containing microspheres') on 16 March 1999.¹⁰⁶

Despite progress towards commercialisation, only limited progress appeared to be made by Gray on the several matters still on the boil at UWA. The UWA Vice-Chancellor (Schreuder) wrote to Gray in June 1999 querying the ownership of the intellectual property in the microsphere technology and the sale of SIR-Spheres to RPH.¹⁰⁷ In his reply, Gray asserted that CRI owned the intellectual property and any potential conflict had been resolved by his reduction from a full time

to a fractional appointment. During 1999 Paragon's website was monitored by UWA's solicitor.¹⁰⁸ In October Schreuder replied to Gray, asserting that UWA, as his employer, would have rights in intellectual property in various patents covering the microsphere technology and seeking further information. In his letter Schreuder reminded Gray of Robson's direction (in November 1997) for him to resign as director of Paragon.¹⁰⁹ In November Gray replied asking Schreuder to provide 'the facts' on which he relied when asserting ownership of the intellectual property in the patents. Gray remained an employee of UWA until 21 November 1999.¹¹⁰

In the following year the public float took place. The professional advisors engaged by Paragon for the float were the legal firm Freehills (undertaking the necessary due diligence enquiries for statements made in the prospectus and to advise generally) and the accounting firm Deloitte. Two firms of patent attorneys were hired to advise on the patents.¹¹¹ The board of Paragon established a due diligence committee to oversee the necessary due diligence processes.¹¹² Outside the areas covered by the reports from the advisors, Gray was responsible for due diligence enquiries about the company and its technology (eg. as to clinical trials).¹¹³ During the due diligence enquiries the potential for a claim by UWA in relation to the early clinical trial data was raised but no express reference to it was made in the prospectus.¹¹⁴ The prospectus included an entry under 'risk factors' referring to the risk of third parties claiming rights in the technology and the following statement: 'The Directors cannot exclude the possibility that a person may claim in future an ownership interest in the technology, but the Directors are not aware from their investigations of any such claims having been made against the Company'.¹¹⁵

The court at first instance found that from his correspondence with Schreuder in 1999, Gray was aware of the potential claims of UWA, he 'must have known' it was a matter relevant to the prospectus due diligence and yet he 'decided not to disclose' the issue to those involved with the prospectus.¹¹⁶ It found it was likely Gray thought UWA was using its claims to the technology to force him to resign and it would not take the matter further.¹¹⁷ The first instance court considered Gray 'took a calculated risk' in not disclosing the correspondence.¹¹⁸

The 'second' Paragon Medical Ltd changed its name to Sirtex Medical Ltd on 4 April 2000.¹¹⁹ The prospectus was launched on 17 July 2000.¹²⁰ It offered 15 million shares at an issue price of \$1.¹²¹ Sirtex Medical Ltd listed on the Australian Stock Exchange in August 2000.¹²²

The Sirtex Medical Ltd prospectus came to the attention of the PVCRC (Barber) in 2000. He decided not to act on it immediately because of the risk a claim by UWA might affect the share price and thereby expose UWA to a damages claim.¹²³ He also recognised there would be difficulties in establishing the origin of the intellectual property rights and the costs to UWA of such a dispute would be considerable.¹²⁴ Barber hoped that if Gray was financially successful in the float, he might support a chair of surgery at the university.¹²⁵

V UWA CLAIMS

In January 2001 UWA embarked yet again on a new plan to commercialise intellectual property generated at the university. It opened an Office of Industry and Innovation (OII),¹²⁶ with Andrew Sierakowski, appointed as its director, reporting to the PVCRC.¹²⁷ In the same month questions arose once again at UWA about the ownership of the microsphere technology, this time in the context of the operation of CACS. Its director (Elizabeth Williams), in her reporting of the past and future activities of CACS, produced a discussion paper that referred to the microsphere technology as being developed within CACS. In his email response to the discussion paper Gray rejected any association between the development of the technology and CACS; he asserted it

had been developed by CRI, an institute independent of CACS and only the early clinical trials had been conducted under the UWA/RPH umbrella.¹²⁸ During the following months there was correspondence between CACS and Gray (acting on behalf of CRI) about the return of what he claimed was CRI-purchased equipment currently being used by CACS.¹²⁹ The dispute escalated and a summons was issued in the local court on 22 March 2002 against Williams.¹³⁰ As part of the dispute about recovery of CRI equipment from UWA, in June and November 2002, legal representatives of UWA contacted Jones, enquiring about the location of various laboratory books recording experimentation undertaken at UWA.¹³¹ Gray asked Jones to give him a number of the books. Gray later denied having possession of these books and they were not produced in the main litigation.¹³²

In February 2003 Sierakowski began to investigate the ownership of intellectual property developed by Gray during Gray's time at UWA.¹³³ The director of legal services at UWA (Kim Heitman) also became involved. The investigation did not unearth any new facts, so why was there continuing interest in the matter? Heitman admitted in evidence that one of the reasons he pursued this further investigation was news of a proposed takeover bid by Cephalon Inc for Sirtex Medical Ltd, something that indicated to Heitman the microsphere technology 'had a significant commercial value'.¹³⁴ In late March 2003 UWA engaged external solicitors to advise in the matter.¹³⁵ Their advice, delivered in September 2004, was that there were several possible causes of action.

The takeover offer (of \$270 million) from Cephalon Inc came in early 2003. It was made in response to Sirtex Medical Ltd's hiring in 2002 of a US corporate advisory firm (Three Oaks) to solicit interest in investment in Sirtex at a time when Sirtex's share price had been falling.¹³⁶ But the Cephalon bid (\$4.85 a share)¹³⁷ occurred when the Sirtex share price was rising.¹³⁸ The bid required a 90 per cent minimum acceptance. On 12 February 2003 Gray granted Cephalon an option over the Sirtex shares held in his name amounting to 19.9 per cent of the shareholding (Gray then controlled 36.9%). His actions surprised other shareholders who had earlier been told by company representatives that Sirtex was worth more than was being offered by Cephalon.¹³⁹ In May, CRI (with an 8.9% shareholding in Sirtex) refused the offer and so it failed.¹⁴⁰

During 2003, as part of its new investigation about the ownership of the microsphere technology, UWA contacted Chen. Chen then engaged a solicitor to advise her in relation to the claims against Gray and Sirtex then being considered by UWA.¹⁴¹ Chen was only interested in the DOX-Spheres technology and she was worried UWA's claims over the microsphere technology would delay the resolution of her dispute over the DOX-Spheres. In order to avoid her claims being found to be made out of time, on 24 October 2003 a writ was filed in the Supreme Court of Western Australia in her name with Gray, CRI and Sirtex Medical Ltd as defendants but it was not served at that time.¹⁴² The Chen writ was served only against CRI¹⁴³ but the litigation was discontinued in early 2005.¹⁴⁴

On 9 September 2003 Gray sold 3 million ordinary shares in Sirtex Medical Ltd to fund manager Colonial First State for \$15.3 million.¹⁴⁵

UWA decided to commence proceedings. A lengthy letter of demand was sent by UWA's solicitors to Sirtex Medical Ltd on 27 September 2004. UWA claimed that Sirtex Medical Ltd now held the relevant intellectual property as constructive trustee.¹⁴⁶ Among the actions demanded by UWA was for Sirtex to amend its share register to record UWA as the beneficial owner of shares then held by Gray and his company (Pine Ridge Holdings Pty Ltd).¹⁴⁷

Proceedings by UWA against Gray and Sirtex Medical Ltd were commenced on 21 December 2004. There was an ex parte hearing and injunctive relief was granted against Gray dealing with his shares and options in Sirtex until 11 January 2005.¹⁴⁸ The following day Sirtex notified the stock exchange of the legal proceedings against it.¹⁴⁹ On 11 January Gray gave undertakings not to deal with his Sirtex shares or options until 8 February. In February CRI was joined in the proceedings and gave undertakings not to deal with its Sirtex shares and options without giving 14 days' written notice to UWA's solicitors.¹⁵⁰

In August 2006 Sirtex announced it would be making an application to include a cross claim against Gray and CRI in the proceedings brought against it by UWA.¹⁵¹

VI CRI

Prior to the hearing, UWA agreed to settle its claim against CRI. This settlement, like all aspects of this litigation, was controversial.

Initially, in response to the letter of demand sent by UWA to Sirtex Medical Ltd and the service on CRI of the Chen writ, CRI decided to dispose of its assets and commence winding up. In December 2004 the general meeting of CRI resolved to donate its assets to the Walter and Eliza Hall Institute (WEHI) and to dissolve CRI.¹⁵² CRI was joined in the UWA proceedings in February 2005 and it gave undertakings not to deal with its Sirtex shares and options without giving 14 days' written notice to UWA's solicitors.¹⁵³ In accordance with this obligation, CRI gave written notice to UWA on 12 April 2006 of its intention to donate its Sirtex shares to the WEHI.¹⁵⁴ In response, on 8 May 2006, UWA sought and obtained interlocutory orders to restrain CRI dealing with its Sirtex shares and options until further court order.¹⁵⁵ Following a mediation conference on 31 July, UWA and CRI agreed to a settlement on the basis that CRI would transfer its Sirtex shares to a trust to be called The Cancer Research Trust (CRT), the board of management of the trust to be made up of representatives of UWA, CRI and the WA Institute for Medical Research.¹⁵⁶

But not everyone associated with CRI agreed with the UWA settlement. A purported general meeting of CRI, held on 27 September 2006, resolved to reject the UWA settlement, and instead to go ahead with the donation of CRI assets to WEHI, and thereafter to wind up CRI. The meeting purported to appoint a new board comprising Gray, his sister and Gray's solicitor¹⁵⁷

Two days later, UWA applied to the Federal Court seeking specific performance of the settlement agreement with CRI. On 5 October the Federal Court appointed a receiver (Mark Conlan) to CRI's Sirtex shares, the receiver to convene a meeting of CRI to decide on ratification of the agreement or some alternative course of action to resolve the UWA proceedings against it.¹⁵⁸ However, in light of uncertainty about the identity of members of CRI and the composition of its board, the receiver later applied to the Federal Court to have his powers extended. The court granted the application, extending the receiver's powers so he could act on CRI's behalf in relation to the litigation brought against it by UWA and, if appropriate, to settle it on terms approved by the court.¹⁵⁹

In March 2007 UWA and CRI sought court approval for the settlement agreement. The application was opposed by Gray and two other purported directors of CRI (as interveners) and Sirtex Medical Ltd. The settlement agreement was approved by the court.¹⁶⁰ Subsequent applications by Gray and Sirtex to appeal the court's decision were unsuccessful.¹⁶¹

On 14 May 2009 court orders were made that the receiver 'be empowered to take all such steps as are necessary to wind up CRI's activities and to deregister it as an incorporated association'.¹⁶² The Sirtex shares held by CRI were transferred to Cancer Research Fund Pty Ltd

(CRF), as trustee for the CRT, on 22 June 2009.¹⁶³ It was subsequently reported in the press that CRF sold its Sirtex shares in September 2009 for \$20.5 million.¹⁶⁴

VII UWA CLAIMS IN THE FEDERAL COURT

When the case came before the Federal Court, UWA argued that Gray had breached his employment contract because he failed to comply with the intellectual property regulations of the university (the patent regulations, 1971 and the intellectual property regulations, 1996). UWA also argued Gray was in breach of an implied term in his contract of employment to the effect that for academic staff who undertook research and used university facilities, any intellectual property created in the course of their employment was owned by the university. During the lead up to the hearing an attempt was made by UWA to argue there had been a breach by Gray of an implied term under which he owed UWA a duty of good faith and fidelity. However this ground had not been part of the original pleadings and the attempt to add it in the course of the litigation was rejected.¹⁶⁵ UWA also argued that by reason of his employment, Gray owed fiduciary duties to the university, including a duty to deal with UWA property rights so as 'to protect and preserve' the property, a duty not to make a secret profit¹⁶⁶ and a duty to account for any secret profit.¹⁶⁷ According to UWA these duties applied during his employment as well as after the employment had ceased. UWA sought orders that Gray transfer his Sirtex shares and options to UWA and account for any benefits obtained by reason of the shares and options.¹⁶⁸

UWA also claimed Sirtex Medical Ltd was knowingly concerned in Gray's various breaches of fiduciary duties owed to UWA and in relation to his wrongful receipt of Sirtex shares, it claimed Sirtex had knowingly assisted Gray by way of the issue of its shares during the public float.¹⁶⁹ UWA sought a declaration that Sirtex held all rights in the microsphere patent applications, patents and inventions on trust for UWA and orders that it transfer the rights to the university.¹⁷⁰

Gray denied any breach of employment contract. He argued the failure of UWA to maintain the patents committee meant he was not in breach of any contractual obligations arising under the intellectual property regulations. He rejected the implied term argued for by UWA. Gray denied his actions breached any fiduciary duties owed to the university. He also claimed the letter of demand and the commencement of proceedings by UWA constituted unjustified threats of infringement action within s 128 of the *Patents Act 1990* (Cth). He claimed UWA had represented that it did not, and would not, assert any rights in the intellectual property in the microsphere technology and to do so now, amounted to misleading or deceptive conduct within s 52 of the *Trade Practices Act 1974* (Cth). Gray also cross claimed against UWA, arguing the letter of demand sent by it to Sirtex Medical Ltd constituted defamation (of him) and it was actuated by malice, so a claim of qualified privilege¹⁷¹ was not available to the university and the representations in the letter also amounted to misleading or deceptive conduct.¹⁷²

In the Federal Court Gray also claimed Chen had falsely represented her contribution as inventor on the DOX-Spheres patent application (of 18 November 1993) and he sought a declaration that Chen had no interest in the application.¹⁷³ Chen denied the false representation claim and asserted that she was an inventor of the technology.

Sirtex Medical Ltd denied it was knowingly involved in any breach of contract or fiduciary duty by Gray. It cross claimed against UWA, arguing the letter of demand and the commencement of proceedings constituted unjustified threats of infringement action within s 128 of the *Patents Act 1990* (Cth). It also claimed UWA (in Barber's January 1997 letter) had represented to Gray it did not, and would not, assert any rights in the intellectual property in the microsphere technology

and Sirtex had entered into dealings in reliance on the representations. Sirtex argued this was the 'true position' of UWA and that if it was not, the representations in the letter amounted to misleading or deceptive conduct within s 52 of the *Trade Practices Act 1974* (Cth).¹⁷⁴

Sirtex Medical Ltd also cross claimed against Gray and CRI. It argued they had each breached their warranties (in respect of ownership) given on the assignment of the technology and Sirtex now wished to rely on the associated indemnities. Sirtex also argued Gray and CRI had engaged in misleading or deceptive conduct.¹⁷⁵ Sirtex claimed Gray had breached duties owed to it 'at law, in equity and pursuant to the provisions of the Corporations Law'¹⁷⁶ by his actions such as not disclosing correspondence with UWA indicating its potential claims to ownership of the microsphere technology.¹⁷⁷

VIII THE FIRST INSTANCE DECISION

Justice French in the Federal Court rejected UWA's claims against Gray and Sirtex Medical Ltd but he found in favour of Sirtex in respect of its cross claim against Gray. Gray's claims against Chen were dismissed.

The court found that of the two intellectual property regulations argued to apply, (patent regulations, 1971 and intellectual property regulations, 1996), only the earlier patent regulations had any operation for most of the relevant period. The intellectual property regulations 1996 had not been formally promulgated as required by s 16E(2) of *The University of Western Australia Act 1911* (WA)), in order to bring them into effect¹⁷⁸ until 30 November 1997, at which time the patent regulations were rescinded.¹⁷⁹ The patent regulations 1971 did not purport to vest intellectual property rights in UWA. What they relied upon was the general law rule discussed below. They obliged persons to disclose 'any patentable invention made or developed wholly or in part during the course of that person's duty or whilst using the University's research facilities' and to assign his or her rights to the university if it decided 'to exercise its rights in the invention' (regulations 6-9). These regulations were in effect procedural rules for the assignment to the university of whatever rights it acquired under the general law rule. As discussed below, the court found the general law rule that vested ownership of employee-generated intellectual property in the employer was 'negated' by the circumstances of Gray's employment, and even if the court was wrong and the term could be implied, it was 'negated' by the change in the scope of Gray's employment over the relevant period.

In contrast to the patent regulations of 1971, the intellectual property regulations 1996 purported to vest ownership of staff-generated intellectual property in UWA and they were found to be invalid in so far as they attempted to do this. Under s 16E of *The University of Western Australia Act, 1911* (WA), the university senate was authorised to make regulations about the 'control and management of its own property' but in the court's view this did not authorise the senate 'to make regulations acquiring property from others or interfering with their rights'.¹⁸⁰ The court considered the words of s 16E were 'not apposite to such a wide construction' and in addition 'there is a well established presumption against construing legislation as interfering with vested proprietary interests' unless this is expressly provided for.¹⁸¹ In the court's opinion, UWA regulations that 'purport to vest intellectual property rights in it or interfere with the intellectual property generated by its academic staff' were invalid.¹⁸²

In the court's view, if the university wished to own intellectual property developed by its staff, it would have to expressly provide for the assignment of such rights in its employment contracts. Once the assignment of rights from staff to university had been affected, UWA could

validly manage and control them under its statute and regulations. But what UWA could not do was 'acquire property from its staff members' by operation of its regulations.¹⁸³ Trying to achieve the result indirectly, by including a regulation to the same effect (ie, vesting ownership of the staff-generated intellectual property in the university) in an employment contract would also not solve the problem as '[t]he incorporation of the statutes and the regulations of the university into staff contracts is, in my opinion, posited on their validity'.¹⁸⁴

Even an express assignment in the employment contract was not a complete answer. The court warned of the potential problems with bringing claims in similar circumstances as these because '... as this case demonstrates, the transaction costs of administering and enforcing such provisions and the uncertainty surrounding their scope and application, raises a real question as to their utility'.¹⁸⁵ What was the court's answer to these problems? In its opinion one alternative for universities to consider was to offer:

...highly competent and experienced commercialisation services in exchange for a negotiated interest in the relevant intellectual property. That alternative offers many benefits in terms of incentives, harmony and certainty that are not available through the enforcement of legal rights unlikely to be capable of precise definition.¹⁸⁶

The other basis for UWA's claims of ownership relied on a term implied into the employment contract of its academic staff.

Ownership of rights in a patent created by an employee is not specifically provided for in the Australian patents legislation.¹⁸⁷ Nevertheless, the legislation contemplates that persons other than the inventor, for example an employer, may acquire rights to the invention. Section 15(1)(b) of the *Patents Act 1990* (Cth) provides that a patent may be granted to a person who 'would, on the grant of a patent for the invention, be entitled to have the patent assigned to the person'. The section relies upon the general law to determine the question of ownership of the patent.

There is case law in Australia and some analogous overseas jurisdictions such as the United States, Canada and New Zealand,¹⁸⁸ establishing an implied term in relation to ownership of employee-generated patents. The effect of the implied term is that inventions created by an employee, where the employee is 'hired to invent', are owned by the employer. However, where the employee is not hired to invent, there is no implied term that ownership of any invention arises in the employer and this is so even though the employee created the invention during work hours and/or using the employer's equipment.¹⁸⁹ The general law implication is subject to express agreement¹⁹⁰ and specific legislation.¹⁹¹ The Federal Court relied upon this authority to find that:

... [a]bsent express agreement to the contrary, rights in relation to inventions made by academic staff in the course of research and whether or not they are using university resources, will ordinarily belong to the academic staff as the inventors under the [*Patents Act*] 1990. The position is different if staff have a contractual duty to try to produce inventions. But a duty to research does not carry with it a duty to invent.¹⁹²

The court described UWA's main claim against Gray as relying on an implied obligation existing 'as an incident of [his] contract of employment' which gave UWA the right to apply for a patent for 'any invention developed by [Gray]'.¹⁹³ But in the circumstances of Gray's employment, the court found several factors militated against a finding of the implied term argued for by UWA.

First, Gray and 'the other academics employed as researchers with him'¹⁹⁴ had 'no duty to invent'.¹⁹⁵ The court was of the view that 'a duty to research does not carry with it a duty to invent'.¹⁹⁶ According to the evidence as to Gray's responsibilities as professor of surgery at

UWA, he was hired to teach and research and patentable inventions may have resulted, but he was not hired to invent.¹⁹⁷ The duty to research could be fulfilled ‘in a variety of ways’ and the choice was ‘within the discretion of the researcher’.¹⁹⁸ Second, the public purposes of UWA as a ‘university’ (a ‘community of teachers and scholars’)¹⁹⁹ meant there was no basis upon which to imply a duty preventing disclosure of the results of research (eg, in scholarly publications), even where public disclosure would potentially affect the patentability of an invention.²⁰⁰ The third factor was that Gray was expected to obtain most of his funding to undertake research (which might include developing inventions) from sources outside the university.²⁰¹ In the field where Gray was working, academics were expected ‘to act to a significant degree as entrepreneurs in securing the resources’ for their work.²⁰² The final factor was that undertaking the kind of research he did, it was essential for there to be collaborative arrangements with third parties such as other research institutions like the CSIRO.²⁰³ In the court’s view this context took Gray outside the circumstances where the common law had previously implied a duty to transfer ownership of employee-generated patents to the employer.²⁰⁴

Had it found in favour of an implied term in Gray’s contract of employment under which UWA would own the rights to the microsphere technology, the court was also of the view that the terms of the UWA/LCI/CRI and CACS affiliation agreements, varying UWA’s usual terms of intellectual property ownership where research funds did not flow via UWA, would have ‘negated that implication in the circumstances to which they applied’.²⁰⁵

The court went on to explain that the outcome of the case would have remained the same, even if the judge had found in favour of UWA in relation to its implied term argument. Essentially this was because of the change in the scope of Gray’s employment over the period. The court agreed with comments in the earlier case of *Victoria University of Technology v Wilson*²⁰⁶ that an employee’s duties often change over time and the precise scope of the job the employee is hired to undertake has to be determined as at the relevant time.²⁰⁷ Over the relevant period the scope of Gray’s employment had changed. From his initial appointment in 1985 he was employed to teach and research but not to invent. The work he undertook for the original Paragon Medical Ltd and for Sirtex Medical Ltd fell ‘outside the scope’ of his employment with UWA.²⁰⁸ When Gray moved to a fractional appointment in March 1997, the arrangement was for him only to do clinical work at RPH and thereafter he was not employed ‘to invent, nor to research’.²⁰⁹ These changed circumstances ‘negated’ any implied term argued for by UWA.²¹⁰

The court went on to discuss the question of the identity of the inventions and their inventors.²¹¹ This question was only relevant if UWA’s implied term argument had been successful. Nevertheless, the court outlined what its opinion on these issues would have been, if it had found in favour of UWA.

Referring to earlier United States and Canadian case law and relying on earlier UK and Australian decisions (in particular *Polwood Pty Ltd v Foxworth Pty Ltd*²¹²), the court was of the view that determining what constituted the invention and its inventor depended upon identifying those persons who contributed to the ‘inventive concept’.²¹³ Finding the inventive concept did not depend on an examination of each claim made in the patent documentation nor was it a question of determining who contributed to individual elements of each claim.²¹⁴ Crucially, it found that Chen did not contribute to the inventive concept of the DOX-Spheres, but rather assisted with its ‘reduction ... into practice’ and therefore she was not a joint inventor.²¹⁵ In the end, of the three inventions examined in the case, the court was satisfied that only the DOX-Sphere was created by UWA staff (but not Chen) during their employment with UWA, so it was only this invention that

might potentially have been caught within the operation of either the employment agreement or the intellectual property regulations.²¹⁶

UWA's further argument that Gray was in breach of his prompt disclosure obligations (under reg 6(1) of the patent regulations, 1971) was also rejected. The committee with the key role in the operation of the regulations (the patents committee) was effectively abandoned by UWA after 1985. Thereafter UWA did not have in place any administrative procedures to respond to a disclosure of an invention by UWA staff. By doing so, UWA was no longer able to carry out its 'reciprocal obligation' of prompt response to the disclosure and it thereby removed 'a necessary condition of the existence of the inventor's [disclosure] obligations'.²¹⁷ Because UWA could not validly acquire property rights from its staff by way of the operation of the intellectual property regulations 1996, Gray could not be found in breach of obligations under its regulations 4(11) (to refrain from acts inconsistent with UWA's rights), 4(13) (to name UWA in any registration applications) or 6 (prompt reporting).²¹⁸

In the employment context there is authority establishing an implied duty of good faith and fidelity owed by the employee. It operates during employment and also survives its termination.²¹⁹ UWA failed to specifically argue this implied term in its original pleadings in the litigation and the court refused its application to add it later. However, a similar fiduciary duty owed by an employee to their employer (to act in good faith and to account for any unauthorised profits received) will be breached where the employee takes for himself or herself an opportunity that in law belongs to the employer. An example of the application of the principle is *Victoria University of Technology v Wilson*.²²⁰ In that case two academics from Victoria University were found to be in breach of the duty when they took an opportunity (involvement in the development of an e-commerce electronic trading platform) which in law belonged to their employer. Justice French in the UWA case considered the particular circumstances in which Gray and his fellow researchers developed the microsphere technology enabled him to distinguish this case from the earlier Victorian decision.²²¹ In the court's view UWA had failed to establish any 'rights or interests' in the microsphere technology and therefore Gray's dealings with it did not amount to breach of any fiduciary duty owed by him as employee.²²²

UWA's case against Sirtex Medical Ltd failed because the underlying case against Gray had failed. The cross claims of Sirtex and Gray against UWA were also dismissed.²²³

The only successful party in the litigation was Sirtex Medical Ltd. It succeeded in its cross claim against Gray. The court found both breach of director's duty and misleading and deceptive conduct in Gray's failure in 2000 to disclose to Sirtex the 1999 correspondence between Gray and UWA. The correspondence would have brought to Sirtex's attention the risk of a claim by UWA to the microsphere technology.²²⁴ However, the cross claim of Sirtex against CRI was dismissed. These claims were based on UWA's claims succeeding and they had been rejected.²²⁵

Gray's claims against Chen were dismissed because the court was of the opinion Gray lacked an interest 'sufficient to warrant' the declaration sought.²²⁶ Although the court had earlier indicated in its judgment its belief that Chen was not an inventor in relation to the relevant technology, it exercised its discretion in declining to make a declaration to that effect.²²⁷

The court made various orders, including orders dismissing UWA's application and ordering it to pay the costs of Gray and Sirtex.²²⁸ Sirtex later settled its costs claim against UWA. Under the settlement, UWA agreed to pay Sirtex \$3.25 million, with an amount of interest on the costs to be determined by the court.²²⁹

IX APPEALS AND MATTERS ARISING

On 8 May 2008 UWA filed an appeal to the full Federal Court in relation to the first instance court's rejection of its claims against Gray. It did not appeal the failure of its claims against Sirtex Medical Ltd. Gray did not appeal the finding in favour of Sirtex against him.²³⁰

Another serious matter for UWA arose later in 2008. On delivery of the first instance judgment (in April 2008) the undertaking given to UWA by Gray, to not dispose of his Sirtex Medical Ltd shares, lapsed.²³¹ On 27 August, without informing UWA, Gray transferred 16,462,283 Sirtex shares to ACN 132 442 114 Pty Ltd, a company in which Gray was the sole shareholder and a director. Gray retained 1,060,000 shares held in the name of companies in which he has a relevant interest. UWA applied for an interlocutory injunction against Gray and the company pending the full Federal Court appeal and sought the company's inclusion in the proceedings but its application was unsuccessful.²³² UWA subsequently applied to amend its originating application by adding ACN 132 442 114 Pty Ltd as a party. This application was also rejected on the ground that it related to matters arising after the date of the judgment and therefore UWA would have to commence separate proceedings against Gray and ACN 132 442 114 Pty Ltd.²³³

In September 2009 the full Federal Court dismissed UWA's appeal and ordered costs in favour of Gray. The appeal court felt significantly constrained in its review of the relevant law by the limited scope of the arguments before it (the case had been brought on a 'narrow and in a sense contrived' basis).²³⁴ Several important areas of law were not included. The issue of an employee's implied duty of good faith and fidelity was not raised in the initial pleadings and an attempt to include it later was rejected at first instance.²³⁵ There were no claims by UWA based on breach of confidence. Even the breach of fiduciary duty argued for by UWA was limited to misuse of property and did not include a claim of misappropriation of an opportunity offered to the university.²³⁶ Though not commenting directly on how such claims, had they been made, would have fared on appeal, the fact of their omission was important enough to be noted on more than one occasion in the judgment.²³⁷ For one of the omitted areas, confidentiality, the court found itself able to include a consideration of this in so far as it 'informs' the court's views on the implied term relating to employee inventions.²³⁸ The court also made it clear that with the limited scope of the arguments before it, it was by no means fully examining the ownership of 'other species of intellectual property' (eg, copyright) in the university employee context.²³⁹

On appeal UWA did not challenge the conclusions of French J that under the legislation establishing UWA it could not by means of regulation, 'acquire property from its staff members' that it did not otherwise own.²⁴⁰ Treating the relevant regulations (the patents regulations 1971) as incorporated into Gray's contractual obligations did not take the matter any further because the existence of the patents committee (to which the Vice-Chancellor was to refer any disclosure by staff of patentable inventions and be advised by) was a 'contingent condition' of the obligation.²⁴¹ Without the committee, Gray was 'excused' from the obligation to disclose.²⁴²

The appeal court considered Gray's obligations under his contract of employment. There was no express obligation to invent, so the court looked at the terms implied at law (no argument was brought about a term implied in fact).²⁴³ According to the appeal court the authorities established that such terms operate in particular classes or types of contract and the test applied, that of 'necessity' takes into account general policy considerations and the consequences of the implication, rather than being limited to circumstances of business efficacy.²⁴⁴ The particular implied term relating to employee inventions was to the effect that an invention created by an employee will be owned by the employer where it is part of what the employee is employed to do, ie where it is part of the employee's 'inventive responsibility'.²⁴⁵ The appeal court cited

cases such as *Victoria University of Technology v Wilson*²⁴⁶ and *Sterling Engineering Co Ltd v Patchett*.²⁴⁷ The difficulty was in determining in particular circumstances what work the employee was engaged to undertake.²⁴⁸

The full Federal Court rejected UWA's claim of implied term. There were several factors weighing against the implication of such a term in the circumstances. Under Gray's contract of employment there was no duty to invent and such a term was inconsistent with the lack of confidentiality restrictions, in particular in respect of publication of the research findings where prior publication could adversely affect the ability to register any patent.²⁴⁹ The implied term was also inconsistent with the extent of Gray's dependence on funding from sources outside the university. The court said that to have implied such a term where UWA was the manager of grants rather than supplier of research moneys, would have allowed UWA 'to reap where [the outside funders] had sown'.²⁵⁰ The extent of research co-operation between different institutions undertaken as part of Gray's research and necessitating exchange of information, also militated against a finding of such an implied term.²⁵¹

The claim of breach of fiduciary duty (misuse of UWA property and not an argument about misappropriation of an opportunity offered to UWA) failed on appeal for the same reason it had failed at first instance, because it was dependent upon the court first finding in favour of UWA in relation to the implied term.²⁵²

Another set of arguments on appeal were about the first instance decisions on the identity of the inventions and their inventors, as determined by looking at each invention's 'inventive concept'. This issue was relevant if, contrary to what the first instance judge and appeal court found, the implied term argued for by UWA applied to Gray. The appeal court was not convinced that any error had been made in the first instance judge's application of the law and after a lengthy examination of the facts, it similarly rejected UWA's arguments about errors in the judge's findings of fact.²⁵³

On 1 October 2009 UWA applied to the High Court for special leave to appeal.²⁵⁴ The special leave application was heard and rejected on 12 February 2010.²⁵⁵ The facts found in the lower courts did not provide an 'appropriate occasion' for the High Court to consider the questions of law being argued.²⁵⁶ At the time, the press indicated that Gray's 29.5 per cent shareholding in Sirtex was valued at 'about \$98 million'.²⁵⁷

In June 2010 Justice Barker in the Federal Court assessed the damages payable by Gray to Sirtex in respect of its successful cross claim against him for his failure to inform it of the UWA claims to the microsphere technology. Orders were made that Gray pay Sirtex \$1,762,224.33 in damages, plus interest of \$812,961.50.²⁵⁸

X IMPLICATIONS

The litigation has a number of direct and indirect implications for the university sector.

One of these implications relates to the legislation establishing the various universities in all states other than Queensland. Justice French found that the definition of 'university' under these statutes adopts a 'traditional formula' recognising 'staff and students as members of the university and not merely as employees and clients respectively'.²⁵⁹ He referred in his judgment to an article by Suzanne Corcoran that argues this formula, along with the five other 'first principles' she outlines, should 'form the basis of any exercise in the interpretation of university statutes'.²⁶⁰ In French J's view the formula 'may also have implications for the nature of the employment relationship between UWA and its academic members', although this was not argued in the case

before him. However, in her article Corcoran herself recognises the increasing commercialisation of the university sector and the effect this will have on the interpretation of university statutes.²⁶¹ In the full Federal Court the judges noted the ‘slight’ evidence in the case about the extent of UWA commercial activities and the effects of such commercialisation on academic obligations.²⁶² Therefore there appears to be continuing scope for argument about the nature of the modern university and, more importantly for claims over employee-generated intellectual property, how this affects the interpretation of university statutes and regulations.

In the case, both at first instance and on appeal, the court was able to distinguish the facts of *Victoria University of Technology v Wilson*,²⁶³ dealing with a breach of fiduciary duty owed by university academics. Both courts regarded it as not directly useful in the very different circumstances, where UWA had limited its argument to misuse of property and did not claim misappropriation of opportunity. However, there are a number of important similarities between the two cases, particularly if you compare the bigger picture, including the other litigation generated by and around the main claims.²⁶⁴

Both cases illustrate some of the significant consequences of commercialising university research. The Victoria University litigation arose in the context of a university seeking to generate outside funds from the education, research and consultancy work of its research centre. The university was suing not only two of its staff members but was also seeking relief against a commercial entity formed to exploit the newly developed technology. The public company, like that in the UWA case (but on a smaller scale), had attracted third party investors whose interests would be affected by any claims to the technology made by the university. In both cases, it was news of an impending sale of interests in the company owning the technology that ultimately spurred the universities to take legal action to preserve their positions. In the UWA case, the ownership of the technology by a listed public company gave rise to considerable argument in the early stages of the litigation about the obligations of the company to alert the stock exchange to the claims made by the university. In the case of Victoria University, the litigation resulted in a transfer of a considerable shareholding in the public company to the university. Almost immediately the university found itself having to fend off an attempt by another shareholder to gain control of the company, as well as being faced with claims by the chief executive of the company in relation to binding promises of shares made early in the company’s development.²⁶⁵

In both instances the academics were in leadership roles involving active engagement in seeking outside funding for university research activities and were personally involved in developing the project. Gray had been working on the microsphere technology before he arrived at UWA and he continued to press its development through his years at UWA and then afterwards through the entity established for its commercial exploitation. Although initially reluctant to become personally involved in developing the e-commerce system architecture, the two academics at Victoria University in the end developed new computing skills to add to their knowledge of international trade, in order to bring the e-commerce project to fruition. The academics at both UWA and Victoria University were keenly aware of the significance of protecting intellectual property rights in the end product of their research endeavours and they obtained professional advice from outside lawyers and patent attorneys.

In both circumstances the academics also relied at various stages on help from others, including other academics and contract research staff. Unlike the Victoria University litigation where this potential problem was not addressed in any detail, in Gray’s case the potential complications were highlighted by the inclusion of Chen in the proceedings. Indeed, the UWA first instance judgment indicates that the ownership of intellectual property generated by research

students involved with several of Gray's projects was a significant point of dispute between UWA and Gray. Much more than the Victoria University case, the UWA case highlights the need to encourage and protect the next generation of university researchers. This includes ensuring their contribution to the development of any new technology is appropriately recognised and rewarded in its subsequent commercialisation.

In the UWA case, because he took the view that the facts before him meant the Victoria University decision did not apply, Justice French did not consider in any depth the facts relevant to considering whether Gray, like the Victoria University academics, had taken for himself an opportunity that in law belonged to his employer. The case therefore does not explore the timing of the approach made by Nomura, nor the extent of its initial investment enabling the launch of the public offering by Sirtex Medical Ltd in 2000. These would be key considerations in determining whether UWA could claim a share of the considerable commercial value subsequently generated by the microsphere technology. Any claims by UWA, if successful, like those of Victoria University, would also have to take into account the considerable personal input of Gray and other key members of his research team. But this in turn would lead, as in the Victoria University case, to the need to also take into account any use by Gray of university resources. The claims of third party investors would also have to be considered.

While referring to an article in a Canadian law journal as providing 'a helpful discussion' of the United States and Canadian cases as they related to universities,²⁶⁶ Justice French at first instance did not go on to explore what was the author's 'more interesting question' in respect of university policies appropriating staff-generated intellectual property. The question posed by the author was whether, in light of the provisions in university policies providing for disclosure of intellectual property, where ownership vests in the university and the university is able to commercialise the intellectual property in its name but is obliged to share the proceeds of the commercialisation with the inventor/author, there would be fiduciary obligations owed by the university to its employee.²⁶⁷ The author considers whether fiduciary obligations might arise either by way of characterising the relationship between the university and inventor as one 'akin' to a joint venture (giving rise to fiduciary obligations) or recognising a duty of 'good faith' arising in the particular employment context (a lesser duty, but one requiring the university to consider the interests of the inventor as well as its own interests).²⁶⁸ He admits there are no Canadian cases on the point and the United States cases show 'reluctance' to find such a duty or duties in these circumstances.²⁶⁹

Another matter raised by Justice French, but not explored to any extent on appeal, is the significant consequences of a dispute over who is the inventor of a patentable invention. Wrongly designating the inventor on a patent application can have a significant effect on the validity of the patent. One of the grounds on which a patent may be found to be invalid and liable to be revoked by the court, is that 'the patentee is not entitled to the patent' (*Patents Act 1990* (Cth) s 138(3) (a)). Entitlement to the patent arises for those persons identified in s 15, including the inventor, persons who on the grant of the patent would be entitled to have the invention assigned to them (eg, an employer) and those who derive their title from the inventor (eg, by assignment). If an individual asserted in the patent application that they were the inventor or joint inventor with another and this claim was incorrect, the patent would be potentially revocable on the ground the individual was not in fact entitled to be granted the patent. There are possible actions that could then be taken to seek to rectify the position prior to grant (eg, an application made under s 104(1) asking the Commissioner for leave to amend the patent documentation or a s 32 application to the Commissioner to determine a dispute between applicants) or in relation to an application for

revocation after grant of the patent (eg, under s 34(1) a court declaration may be made as to the eligible persons).

This issue has been discussed by Australian courts on a number of recent occasions, in particular in the context of employees and team-based research.²⁷⁰ The difficult and detailed task of determining inventorship for the patentable inventions at issue in the UWA case was undertaken by Justice French and the appeal court even though it was not strictly necessary in light of the decision to reject the implied term argument. The judgments indicate how difficult a task this is, for example determining whether the role of supervising researcher (Gray) would be sufficient to make the person the inventor or a joint inventor.²⁷¹ The evidence in the case showed that researchers were coming and going from Gray's research team. For some on contract, their stay depended on further funds being available. For research students, it was a matter of completing their qualifications and moving to the next position in their research careers. Although the research team worked under the general umbrella of the microsphere technology, its individual members were involved in different parts of the associated technologies. In these circumstances tracing a clear line of inventorship becomes a difficult and time-consuming task.

One issue the judgments do not directly address but which anyone interested in the current and future operations of a university would find an important matter for further consideration, is research management or governance. A matter highlighted by the case is the complex nature of current university research management. Even for the one specific area of the microsphere research, there were the separate LCI and CRI entities²⁷² and later came CACS, an entity that was not in fact separate but a university vehicle for administering the joint operations of LCI/CRI and UWA in this area. In the main case and in the wider Sirtex litigation, there is reference by the courts to the failure of some entities to properly record meetings with appropriate signed minutes and to comply with the entity's constitution. More importantly perhaps is the evidence of the use of the letterhead of one entity in circumstances where more than one entity was involved, leading in some instances to misunderstandings about just what legal entity was the contracting party.²⁷³

Another related issue was the not infrequent use of separate agreements establishing research centres and providing for collaboration with third parties, containing provisions for intellectual property ownership that differed significantly from the provisions in the university regulations.²⁷⁴ This would obviously give rise to a complicated web of contractual obligations and rights for the university to monitor and administer.

XI CONCLUSION

The microsphere litigation well illustrates the tortured path from conceiving a research programme, through developing a patentable invention, to the eventual commercialisation of the invention in the marketplace. The path is difficult, especially where a medical product or process requires testing and government authorisation is involved. It reflects the reality of the university-based researcher, undertaking the constant and gruelling task of applying for research funds, often done for surprisingly small amounts and often unsuccessful. Where once there may have been envisaged a community of scholars, the litigation reveals sometimes ferocious competition between researchers for funding, even at the same university and in the same faculty.

Against this rather gloomy backdrop stands an individual researcher who has spent a considerable part of his professional life concentrating his and others' efforts on a line of research, developed by increments over an extended period and only now showing the commercial success made possible through the considerable investment of third parties. While the first instance judge

accepted that Gray may have been considered by others a difficult person to deal with, it appears that a difficult personality may be a desirable feature when it comes to pushing through to a successful result in commercialising science. A key unanswered question in this case is whether the success could have been achieved to the same extent if ownership of the intellectual property had been claimed and retained from the outset by UWA.

The case in the Federal Court and then appealed to the full Federal Court, limited by the arguments brought and areas of law not pleaded, was not an ideal test case for consideration of the important issue of employee inventions in the university context. The full Federal Court in particular pointed to the important role of the law of confidentiality in determining the appropriateness of a more generalised implied term about employee inventions. The first instance judge saw a resolution of the issue by way of express provision in individual contracts of employment but even this was not without associated problems of ‘transaction costs’ and some uncertainty.²⁷⁵ The appeal court found the implied term argued for by UWA was a ‘particularly blunt instrument to settle the ownership of employee inventions’²⁷⁶ and looked instead to legislation or an ‘express contractual regime’ to deliver a ‘less crude and more fair and reasonable result’.²⁷⁷ Similarly constrained by the argued case, the High Court declined to grant special leave to appeal because the findings of fact in the lower courts would not provide the appropriate opportunity to look at the legal issues more widely.

Now the High Court has declined to look at the issue of ownership in university employee-generated inventions, it is difficult to see how French J’s ideal of ‘incentives, harmony and certainty’ coexisting in commercialised university research can be achieved without considerable further discussion by all the stakeholders involved in the issue.

Keywords: university employee invention; ownership; employment contract; implied term.

ENDNOTES

- 1 *University of Western Australia v Gray* (2008) 246 ALR 603, 618.
- 2 *University of Western Australia v Gray* (2008) 246 ALR 603.
- 3 *University of Western Australia v Gray* (2009) 259 ALR 224.
- 4 *University of Western Australia v Gray* (2008) 246 ALR 603, 683.
- 5 Ibid.
- 6 Ibid 689.
- 7 Ibid 690-1.
- 8 Ibid 695.
- 9 Ibid 702.
- 10 Ibid 705.
- 11 Ibid 711.
- 12 Ibid 675.
- 13 No meetings of the patent committee were held after 1985: *ibid*.
- 14 Preamble to the regulations: *ibid* 623.
- 15 Another company, Univenton Ltd was incorporated by UWA at the same time but the evidence did not indicate any activity during the relevant period: *ibid* 658.
- 16 Ibid 659-60.
- 17 Ibid 659.
- 18 Ibid 661, 675.
- 19 Ibid 661.
- 20 Ibid 713.

- 21 Ibid 712.
- 22 Ibid 713-15.
- 23 Ibid 718.
- 24 Ibid 720.
- 25 Ibid 665, 676.
- 26 Ibid 731.
- 27 Ibid 732.
- 28 Ibid 738.
- 29 Ibid 733, 897. It is indicated in the legal advice of UWA's solicitors as having lapsed at the time of the litigation: *ibid* 899.
- 30 Some third party consultancy services provided to Uniscan/CABR continued to be provided but now they were provided to UWA directly: *ibid* 667.
- 31 Ibid 722.
- 32 Ibid 724.
- 33 Ibid 724.
- 34 In the early 1990s Jones worked mostly on the Thermo-Spheres technology. In this period Chen concentrated on the DOX-Spheres technology, working on the makeup of the microspheres to better deliver the anti-cancer drugs, in particular by including magnetic particles in the microspheres: *Ibid* 728. Ross McCulloch joined the research team in 1991 to work on the DOX-Sphere technology, in particular the controlled release of the anti-cancer drugs carried by the spheres: *ibid* 757.
- 35 The work involved some other research staff employed by Monash University and it continued with them even after Brendt left Monash: *Ibid* 727. Some of the work, funded by CRI, was undertaken by a masters student from 1992 to 1994. It was suspended for a time but later, in 1997-8 the work continued using the same masters student, but it was undertaken at Paragon Medical Ltd. Before the work continued, Monash University had confirmed to Gray that it would not assert rights in the intellectual property associated with the project as the technology had been brought to Monash by Gray. The work was finally abandoned in 2001-2 and alternative forms of the sphere were developed instead: *ibid* 727-8.
- 36 Ibid 760.
- 37 Ibid.
- 38 Ibid.
- 39 Ibid 763.
- 40 Ibid.
- 41 Ibid.
- 42 Ibid.
- 43 Ibid 668.
- 44 Ibid 669.
- 45 Ibid 675; 676.
- 46 Ibid 671.
- 47 Ibid 772.
- 48 In July 1994 the UWA Senate finally approved affiliation between LCI and UWA, subject to a formal agreement being prepared. The evidence indicated Gray thought there were payroll tax benefits if LCI staff were paid by UWA: *ibid* 772, 780, 800.
- 49 In 1993 Gray complained to the Medical Board of Western Australia about Patterson's conduct and argued he should not remain a member of the Board. The Board investigated the matter and decided not to take any action: *ibid* 775.
- 50 Ibid 764.
- 51 Ibid 897.
- 52 Ibid 782-3.
- 53 Ibid 790. This was evidenced by a secretly recorded (by Chen) telephone conversation between Chen and Gray.
- 54 Ibid 804.

- 55 Ibid 806.
56 Ibid 807.
57 Ibid.
58 Ibid 794.
59 Ibid 797.
60 Ibid 809.
61 Ibid.
62 Ibid.
63 Ibid.
64 Ibid 811.
65 Ibid 931-2.
66 Ibid 932.
67 Ibid 897.
68 Ibid 819.
69 Ibid 899.
70 Ibid 808.
71 Ibid 829.
72 Ibid 822.
73 Ibid 844.
74 Ibid 834.
75 Ibid 836.
76 Ibid 837.
77 Ibid.
78 Ibid.
79 Ibid 852.
80 Ibid 844.
81 Ibid.
82 Ibid.
83 Ibid 857.
84 Ibid 852.
85 Ibid.
86 Ibid 853.
87 Ibid.
88 In the case of one student who was being jointly supervised (with the Department of Physics) by Jones, the student felt pressured to agree and decided ultimately to withdraw from the joint supervision: ibid 856.
89 The 'first' Paragon Medical Ltd was deregistered on 21 September 1999: ibid 888.
90 Ibid 917; *Sirtex Medical Ltd Prospectus*, 2000, 14. Its original shareholders included Gray, CRI, Jones, Karlson and NJI No 2 Investment Fund (managed by Nomura/JAFCO Investment (Asia) Ltd). Gray was one of its directors. Gray was Medical Director 1997-August 2005, Head of its Research and Development Department 2002-April 2004 and company chairman 19 December 2002-22 August 2006, chief executive officer 6 June 2003 to 26 May 2005 and a consultant medical advisor August 2005-24 October 2006. Gray was removed from the board of directors by resolution of the general meeting on 23 January 2007: ibid 917-8.
91 Ibid 847.
92 Ibid 849.
93 Ibid 847.
94 Ibid 848.
95 Ibid 848-9.
96 Ibid 851.
97 A former managing partner of Ernst & Whinney, accountants, who became involved with Gray's research in mid-1994: ibid 782.

- 98 Ibid 849-50.
- 99 Ibid 857.
- 100 Ibid 860.
- 101 Approvals had also been obtained from overseas regulatory agencies for sale in New Zealand, Hong Kong and Singapore. This was the first generation SIR-Spheres: *Sirtex Medical Ltd Prospectus*, 2000, 3, 17.
- 102 *University of Western Australia v Gray* (2008) 246 ALR 603, 897.
- 103 Ibid 897, 902.
- 104 He joined Gray's research team in 1997: *ibid* 728.
- 105 Ibid 902.
- 106 Ibid 896.
- 107 Ibid 863.
- 108 Ibid.
- 109 Ibid 864.
- 110 Ibid 920.
- 111 Ibid 867.
- 112 Ibid.
- 113 Ibid 868.
- 114 Ibid 875.
- 115 *Sirtex Medical Ltd Prospectus* 2000, 32.
- 116 *University of Western Australia v Gray* (2008) 246 ALR 603, 878.
- 117 Ibid.
- 118 Ibid.
- 119 Ibid 888, 917.
- 120 Ibid 877, 880
- 121 *Sirtex Medical Ltd Prospectus*, 2000, 1.
- 122 *University of Western Australia v Gray* (2008) 246 ALR 603, 917.
- 123 Ibid 883-4.
- 124 Ibid 883-4, 893.
- 125 Ibid 884.
- 126 Ibid 673.
- 127 Ibid 892.
- 128 Ibid 886.
- 129 The dispute over the ownership of equipment led to a complaint to police lodged by Gray: *ibid* 887.
- 130 The matter was settled before the hearing; UWA handed over the disputed equipment to CRI and paid its legal costs: *ibid* 888.
- 131 Ibid 890.
- 132 Gray accepted that the laboratory books 'would be the best contemporaneous evidence of the process of invention and the development of the technologies'. The evidence before the court at first instance was not sufficient to prove Gray 'deliberately withheld' the books from the litigation but in the court's view the fact they were missing was 'suspicious' and the evidence was such as to cause the court 'to doubt the reliability of [Gray's] recollection where it serves his interests to forget': *ibid* 891-2.
- 133 Ibid 892.
- 134 Ibid 893.
- 135 Ibid.
- 136 Kate Askew, 'The \$100 Million Man', *Sydney Morning Herald* (Sydney), 2 August 2003, 45.
- 137 The bid valued the company at \$270 million: *ibid*.
- 138 In December 2002 the share price had reached a high of \$5.64: *ibid*.
- 139 Ibid.
- 140 *Gray v John Fairfax Publications Pty Ltd* [2007] WASC 274 Annexure; Askew, above n 136.
- 141 *University of Western Australia v Gray* (2008) 246 ALR 603, 905.

- 142 The documents filed in support of the litigation claimed Chen was the ‘sole inventor’ of the invention described in patent application No PM2492: *ibid* 906-8.
- 143 *Ibid* 907.
- 144 *Ibid* 908.
- 145 Kate Askew, ‘Sirtex founder sells 5%’, *The Age* (Melbourne), 11 September 2003, 2.
- 146 *University of Western Australia v Gray* (2008) 246 ALR 603, 909-913.
- 147 *Ibid* 913.
- 148 *University of Western Australia v Gray* [2005] FCA 277, [7].
- 149 Sirtex Medical Ltd ASX Announcement ‘Legal Proceedings’, 22 December 2004.
- 150 *University of Western Australia v Gray* [2005] FCA 277, [9].
- 151 Sirtex Medical Ltd ASX Announcement ‘Legal Proceedings and New Chairman’, 22 August 2006. Gray resigned as Chairman and Richard Hill was appointed in his place.
- 152 *University of Western Australia v Gray (No 6)* [2006] FCA 1825, [57].
- 153 *University of Western Australia v Gray* [2005] FCA 277, [9].
- 154 *University of Western Australia v Gray (No 3)* [2006] FCA 686, [6].
- 155 *Ibid*.
- 156 *University of Western Australia v Gray (No 6)* [2006] FCA 1825, [8].
- 157 *Ibid* [19], [58].
- 158 *University of Western Australia v Gray (No 4)* [2006] FCA 1350.
- 159 *University of Western Australia v Gray (No 6)* [2006] FCA 1825.
- 160 *University of Western Australia v Gray (No 10)* [2007] FCA 377.
- 161 *Gray v Cancer Research Institute Incorporated* [2007] FCAFC 149.
- 162 *University of Western Australia v Gray (No 27)* [2010] FCA 216.
- 163 Sirtex Medical Ltd ASX Announcement ‘Legal Proceedings’, 7 October 2009.
- 164 ‘Cancer Research Fund Quits Stake’, *The West Australian* (Perth) 22 September 2009, 34; Sirtex Medical Ltd, ASX Announcement ‘Ceasing to be a substantial holder’, 21 September 2009.
- 165 *University of Western Australia v Gray (No 17)* [2007] FCA 924, [42]; *University of Western Australia v Gray* (2008) 246 ALR 603, 697.
- 166 *University of Western Australia v Gray* (2008) 246 ALR 603, 696.
- 167 *Ibid* 921.
- 168 *Ibid* 617.
- 169 *Ibid*.
- 170 *Ibid*.
- 171 *Butterworths Concise Australian Legal Dictionary*, 2nd edition, 1998 explains the defence of qualified privilege at 359: ‘... where the person who made the communication had an interest or a duty, “legal, social or moral”, to make it to the person to whom it was made, and the person to whom it was made had a corresponding interest or duty to receive it: *Adam v Ward* [1917] AC 309... It will not be available if the publication was motivated by malice or an improper purpose: *Calwell v Ipec* (1975) 135 CLR 321’.
- 172 *University of Western Australia v Gray* (2008) 246 ALR 603, 924.
- 173 *Ibid* 925.
- 174 *Ibid*.
- 175 *Ibid*.
- 176 *Ibid* 986.
- 177 *Ibid*.
- 178 The earlier patent regulations were made by the university senate at a time when *The University of Western Australia Act, 1911* (WA) did not require promulgation of regulations so they were effective, at least by 1975 when it had been made clear under *The University of Western Australia Amendment Act 1975* (WA) that such regulations were not required to be laid before both houses of state parliament or published in the *Gazette* before they took effect: *ibid* 630.
- 179 *Ibid* 633.
- 180 *Ibid* 618.

- 181 Ibid 634.
- 182 Ibid 618.
- 183 Ibid 635.
- 184 Ibid.
- 185 Ibid 618.
- 186 Ibid.
- 187 Contrast the UK legislation: s 39(1),(2) *Patents Act 1977* (UK) providing for ownership and s 40 providing for compensation for employees, *Sterling Engineering Co Ltd v Patchett* [1955] AC 534: both referred to in the judgment: ibid 640. Compare Australian copyright law under which the copyright in works (literary, dramatic, musical and artistic) ‘made by the author in pursuance of the terms of his or her employment by another person under a contract of service or apprenticeship’ is owned by the employer, subject to contrary agreement: *Copyright Act 1969* (Cth) ss 35(6), (3).
- 188 *Spencer Industries Pty Ltd v Collins* (2003) 58 IPR 425, *Victoria University of Technology v Wilson* (2004) 60 IPR 392, *Triplex Safety Glass Company v Scora* [1938] 1 Ch 211, *US v Dubilier Condenser Corp* (1933) 289 US 178, *Comstock Canada v Electec Ltd* (1991) 45 FTR 241.
- 189 In one jurisdiction, the US, these circumstances give rise to the ‘shop right’ under which the employer does not acquire ownership of the invention but may exercise a royalty free non-exclusive licence to use the invention: *University of Western Australia v Gray* (2008) 246 ALR 603, 648.
- 190 Kevin LaRoche, ‘Appropriating Innovation: The Enforceability of University Intellectual Property Policies’ (2005) 14 *Education & the Law* 249, 257, 261.
- 191 See the effect of specific legislation, for example in the US (from 1980) the *Bayh-Dole Act* (*Patent Act* 35 USC 200 to 212) under which the university has in effect a first right of refusal in respect of ownership of patentable inventions made under federal government agency grants or contracts but must share royalties with the inventor: John Cross, ‘Allocating University-Connected Intellectual Property Rights in the United States’ in Gustavo Ghidini and Luis Mariano Genovesi (eds) *Intellectual Property and Market Power, International Association for the Advancement of Teaching and Research in Intellectual Property Papers 2006-7* (2008) 495, 504.
- 192 *University of Western Australia v Gray* (2008) 246 ALR 603, 618.
- 193 Ibid 928.
- 194 Ibid 931.
- 195 Ibid 929.
- 196 Ibid 618.
- 197 Ibid 929.
- 198 Ibid.
- 199 Ibid 930.
- 200 Ibid 656. Patentability depends upon a number of elements including manner of manufacture, novelty, inventive step and utility (s 18(1) *Patents Act 1990* (Cth)).
- 201 Ibid 930.
- 202 Ibid.
- 203 Ibid.
- 204 Ibid.
- 205 Ibid 934.
- 206 *Victoria University of Technology v Wilson* (2004) 60 IPR 392.
- 207 *University of Western Australian v Gray* (2008) 246 ALR 603, 934.
- 208 Ibid.
- 209 Ibid.
- 210 Ibid 934-5.
- 211 The court referred to the lack of particulars in the UWA litigation documentation about these matters: ibid 939.
- 212 *Polwood Pty Ltd v Foxworth Pty Ltd* (2008) 75 IPR 1.
- 213 *University of Western Australia v Gray* (2008) 246 ALR 603, 948.
- 214 Ibid.

- 215 Ibid 966.
216 Ibid 619.
217 Ibid 679.
218 Ibid 975-6.
219 Ibid 697.
220 *Victoria University of Technology v Wilson* (2004) 60 IPR 392.
221 *University of Western Australia v Gray* (2008) 246 ALR 603, 931.
222 Ibid 977.
223 Ibid 617, 981, 983-4.
224 Ibid 619, 987.
225 Ibid 988.
226 Ibid.
227 Ibid.
228 The orders included orders that Gray and Sirtex pay UWA's costs in relation to Gray and Sirtex's cross-claims against the university and Gray pay Sirtex its costs in relation to Sirtex's cross claim against him: *ibid* 988-9.
229 Sirtex Medical Ltd ASX Announcement, 'Legal Proceedings Update', 5 November 2009.
230 Sirtex Medical Ltd ASX Announcement, 'UWA Proceedings', 9 May 2008.
231 *University of Western Australia v Gray (No 24)* [2008] FCA 1400, [3].
232 *University of Western Australia v Gray (No 23)* [2008] FCA 1427.
233 *University of Western Australia v Gray (No 24)* [2008] FCA 1400.
234 *University of Western Australia v Gray* (2009) 259 ALR 224, 240.
235 Ibid.
236 Ibid.
237 See, eg, *ibid* 256, 259.
238 Ibid 259.
239 Ibid 264.
240 Ibid 244.
241 Ibid 247.
242 Ibid.
243 Ibid 263.
244 Ibid 253-255.
245 Ibid 258.
246 *Victoria University of Technology v Wilson* (2004) 60 IPR 392.
247 *Sterling Engineering Co Ltd v Patchett* [1955] AC 534.
248 *University of Western Australia v Gray* (2009) 259 ALR 224, 258.
249 Ibid 267.
250 Ibid 268.
251 Ibid 269.
252 Ibid 271.
253 Ibid 271-297.
254 Sirtex Medical Ltd ASX Announcement 'Legal Proceedings', 7 October 2009.
255 *University of Western Australia v Gray* [2010] HCATrans 011.
256 Ibid [640]-[645].
257 Chalpat Sonti 'UWA fails in final bid to secure stake in cancer treatments' *Sydney Morning Herald* (Sydney), 12 February 2010 <<http://www.smh.com.au>> at 18 February 2010.
258 *University of Western Australia v Gray (No 29)* [2010] FCA 665.
259 *University of Western Australia v Gray* (2008) 246 ALR 603 at 620.
260 Susan Corcoran, 'First Principles in the Interpretation of University Statutes' (2000) 4(2) *Flinders Journal of Law Reform* 143, 148.
261 Ibid 156.

- 262 *University of Western Australia v Gray* (2009) 259 ALR 224, 264-5.
- 263 *Victoria University of Technology v Wilson* (2004) 60 IPR 392.
- 264 For the Victoria University litigation see generally Mary Wyburn, 'Conflicts of Ownership and Commercialisation in the Research of University Academics in Australia: Victoria University's IP3 Litigation' (2007) 12(1) *Australia & New Zealand Journal of Law & Education* 85.
- 265 Ibid 90-91.
- 266 Kevin LaRoche 'Appropriating Innovation: The Enforceability of University Intellectual Property Policies' (2007) 20 *Intellectual Property Journal* 135.
- 267 Ibid 166-7.
- 268 Ibid.
- 269 Ibid 175.
- 270 *University of British Columbia v Conor Medsystems Inc* [2006] FCAFC 154; *Polwood Pty Ltd v Foxworth Pty Ltd* [2008] FCAFC 9; *The Commonwealth of Australia v Charlesworth* [2008] APO 16; *Novogen Research Pty Ltd v GJ Consultants Pty Ltd* [2008] APO 24; Dimitrios Eliades 'Management of Intellectual Property-Inventors and Employees' (2008) 28 *Hearsay* (Journal of the Bar Association of Queensland).
- 271 For example Burton and Jones were doing work and Gray was meeting them once a week; there was evidence that Gray was visiting the laboratory but his visits were 'fleeting' and he was not seen actually doing any experiments; Gray had input into the analysis of the results of the research group: *University of Western Australia v Gray* (2008) 246 ALR 603, 703.
- 272 *University of Western Australia v Gray (No 6)* [2006] FCA 1825.
- 273 For example LCI letterhead when CRI or Sirtex Medical Ltd was intended as the negotiating party: *University of Western Australia v Gray* (2008) 246 ALR 603, 797.
- 274 For example the CSIRO contract: *ibid* 702-3.
- 275 Ibid 618.
- 276 *University of Western Australia v Gray* (2009) 259 ALR 224, 270.
- 277 Ibid 271.

