Lockwood Security Products Pty Ltd v Doric Products Pty Ltd (No 2) [2007] HCA 21

HIGH COURT OF AUSTRALIA

GUMMOW, HAYNE, CALLINAN, HEYDON AND CRENNAN JJ

GUMMOW, HAYNE, CALLINAN, HEYDON AND CRENNAN JJ:

¹ The appellant ("Lockwood") appeals from a decision of the Full Court of the Federal Court¹ in favour of the respondent ("Doric"). The appeal concerns the validity of certain claims of Australian Letters Patent No 702534 ("the Patent") held by Lockwood for an invention entitled "KEY CONTROLLED LATCH". The main issue is whether those claims in the Patent lack an inventive step. The validity of the Patent in terms of whether the claims were fairly based has previously been considered, and upheld, by this Court².

Background to the invention

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Details of the Patent and related facts are set out in the decisions of the courts below, and in the previous decision of this Court³. For the purposes of this appeal they may be stated as follows. The Patent claims a "key controlled latch":

"This invention relates to latches of the kind which are controlled by a key operable lock and which are intended for use on doors and other movable members adapted to close an access opening ...

Latch assemblies for doors commonly include a turn knob or handle which is generally located at the inside of the door and which is rotated to withdraw the latch bolt into its casing. In order to improve the security of such assemblies, manufacturers have included a key operated lock which is operative to releasably hold the turn knob or handle against rotation."

- 2 Lockwood Security Products Pty Ltd v Doric Products Pty Ltd (2004) 217 CLR 274.
- 3 See the reasons of the primary judge: *Doric Products Pty Ltd v Lockwood Security Products Pty Ltd* (2001) 192 ALR 306 at 310-313 [8]-[19]; the reasons of Wilcox J in the first Full Court: *Lockwood Security Products Pty Ltd v Doric Products Pty Ltd* (2003) 56 IPR 479 at 481-482 [5]-[12]; the reasons of this Court: *Lockwood Security Products Pty Ltd v Doric Products Pty Ltd* (2004) 217 CLR 274 at 279-283 [1]-[13]; and the reasons of the Full Court: *Lockwood Security Products Pty Ltd* (2005) 226 ALR 70 at 72 [8]-[13].

¹ Lockwood Security Products Pty Ltd v Doric Products Pty Ltd (2005) 226 ALR 70.

The specification further explains:

"Such locks are typically arranged so as to be operated from the inside of the door and are not operable from the outside of the door. In particular, key operation of the latch from the outside of the door will not release the lock. That can lead to serious problems in circumstances where the door needs to be opened urgently from the inside, particularly if the lock key has been misplaced or is not conveniently accessible.

It is an object of the present invention to provide a key controlled latch which can be released from a locked condition by use of a key at the outside of the door or other member with which the latch is used."

That passage in the specification loomed large on the issue of obviousness. The primary judge, Hely J, rejected Doric's submission that those words in the specification constituted an admission which supported the assertion that claim 1 was obvious on its face⁴. On appeal, the Full Court overturned the decision of the primary judge and inferred from that passage an "implicit 'corollary' admission" as to common general knowledge and inventive step⁵ which it said could be taken into account without any witness deposing to it⁶.

5 The specification then describes normal latch assemblies:

"[O]peration of the outer or second actuator does not affect the operation of the locking means. That locking means remains active in spite of operation of the outer actuator, and can be rendered inactive only by appropriate and deliberate operation of the locking means from the inner side of the latch assembly. It is usually the case in such prior assemblies that the locking means is key operated. That is, the locking means will generally include a key operated tumbler lock and locking mechanism connected to that lock so as to be influenced by operation of the lock. The second or outer actuator may also include a key operated tumbler lock, but in conventional assemblies of the foregoing kind operation of that lock does not influence operation of the first actuator locking means. The two locks are arranged so that one is operated from the inner side of the assembly and the other is operated from the outer side."

During the 1980s, Lockwood produced a range of locks which were designed to be mounted on the rim of a door, such as the front door to a house. The product which preceded the lock which is the subject of the Patent was known

- **5** (2005) 226 ALR 70 at 101 [137], [140].
- 6 (2005) 226 ALR 70 at 105 [157].

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^{4 (2001) 192} ALR 306 at 341 [201]-[202].

as the "Lockwood 001": it did not contain the "safety release mechanism" which is found in the Patent.

The Lockwood 001 differed from earlier locks in one important respect. Earlier rim mounted locks were relatively flat on the outside surface of the door, and consisted of a circular plate with a keyhole recess in its centre. The lock operated by a retractable bevelled latch bolt sliding in or out of a cavity in the door frame. The latch bolt could be withdrawn from the cavity, and the door opened either by inserting and turning the key in the outside keyhole or by rotating the lever or handle on the inside of the door. Each of the outside key and the inside lever or handle was described as an "actuator". The operations of the outside actuator and the inside actuator were independent of each other.

In these earlier locks, if an intruder entered premises through a window, the intruder could then exit through the front door by simply turning the internal handle, and thus escape easily taking large items. In this way, while earlier locks provided outside security in that they could not be opened from the outside without a key, once a person was inside the locks provided no internal protection against someone using the door to exit the house. So, if the door were next to a glass pane, the glass could be broken and an intruder could reach inside and turn the handle to withdraw the latch bolt and open the door.

The Lockwood 001 provided internal security by adding a key lock to the internal handle. When activated, this key lock prevented the internal handle from being rotated. The door could only be opened from the inside if the key for the handle had deactivated the internal lock. However, the internal lock did not operate to withdraw or prevent the withdrawal of the latch bolt: it only operated to prevent the turning of the inside handle. In the Lockwood 001 the inside and outside actuators remained independent of each other and were still the only means of effecting the withdrawal of the latch bolt. The outside actuator did not effect the activation or deactivation of the lock on the internal handle.

While the lock on the inside handle provided internal security, it also had the effect of locking a person inside the house if that person did not have ready access to the key (if, for example, the key had been misplaced, or accidentally left in the outside lock). Unless a person in the house took the deliberate step of inserting the key into the inside handle and deactivating the lock, once the door closed the inside handle could not be turned in order to withdraw the latch bolt. As was said in the earlier proceedings in this Court between these parties⁷:

> "The problem was that while it was possible for an occupant of the premises to enter by unlocking the door from the outside and then to close it, the internal handle or knob remained locked until the key was used to unlock it from the inside. If the occupant failed to do this on entry, dangerous

7 (2004) 217 CLR 274 at 281 [8].

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circumstances could arise. For example, an occupant, encumbered by full shopping bags, who entered by using a key from the outside, left the key in the door or misplaced it and then discovered that the door had banged shut would find it impossible to leave through the door if a fire broke out inside, or if a child were seen entering a position of danger outside."

The litigation

11 The priority date of the Patent is 14 February 1996. The application for the Patent was filed on 11 February 1997 and Lockwood was entered on the Register as the proprietor on 2 November 2000. These proceedings were commenced on 12 October 2000. The respondent to this appeal, Doric, sought relief under s 128 of the *Patents Act* 1990 (Cth) ("the Act") on the grounds that Lockwood had unjustifiably threatened Doric and its two distributors with infringement proceedings. Lockwood cross-claimed against Doric for infringement of the Patent; in a second cross-claim Doric sought revocation of the Patent on the basis that it was invalid.

In its third further amended particulars of invalidity, Doric alleged a number of grounds: first, that the Patent was not novel, having reference to the prior art including Lockwood's own products; second, that each claim of the Patent did not involve an inventive step when compared with the prior art base as it existed before the priority date of each claim, and each claim was obvious to a person skilled in the relevant art; third, the Patent was not fairly based; fourth, the description in the specification was insufficient; fifth, certain claims lacked utility; and sixth, the description in the specification was uncertain.

In 2001 the primary judge determined that of the Patent's 33 claims, some claims were invalid by virtue of a lack of novelty; and that all claims except one, constituted by drawings which claimed a preferred embodiment, were invalid for not being fairly based on the matter described in the specification⁸. His Honour also found that it had not been established that any of the claims was invalid for lack of inventive step, or was obvious, having regard to what was known and used prior to the priority date of each claim⁹. Further, on the proper construction of its claims, the Patent was not invalid as a result of insufficiency, lack of utility, or uncertainty. The primary judge found that some claims of the Patent were infringed by Doric's products, but that other claims were not infringed¹⁰.

- 9 (2001) 192 ALR 306 at 333-346 [154]-[226].
- **10** (2001) 192 ALR 306 at 313-327 [20]-[108].

^{8 (2001) 192} ALR 306 at 352 [263].

¹⁴ Lockwood appealed to the Full Court of the Federal Court of Australia¹¹ (Wilcox, Branson and Merkel JJ) ("the first Full Court") in respect of the trial judge's findings concerning fair basis and non-infringement. By a notice of contention, Doric pursued arguments relating to the invalidity of the Patent on the basis of obviousness and insufficiency. The first Full Court dismissed the appeal, holding that the Patent was invalid for lack of fair basis; no member of the Court made any determination in respect of infringement, obviousness or insufficiency¹².

¹⁵ The findings of the first Full Court relating to fair basis were set aside on Lockwood's successful appeal to this Court¹³. The remainder of the matters in dispute were remitted to a differently constituted Full Court (Heerey, Sundberg and Bennett JJ¹⁴) ("the Full Court") which made findings in relation to infringement, insufficiency and obviousness. It is the reasons of the Full Court dealing with obviousness or lack of inventive step, and the consequential orders, which are the subject of this appeal.

The Patent

- 16 The Patent added an extra integer to the known Lockwood 001, being the lock release means which allowed the outside actuator (for example, the key) to have the new and additional function of deactivating the internal handle lock, as well as retaining its previous single function of withdrawing the latch bolt to permit entry.
- In this way, a house maintained its internal security in the absence of the homeowner, if the lock was activated before they left the house. However, the homeowner would not be inadvertently locked inside on return, because the act of turning the outside actuator (the key) to re-enter the house deactivated the internal handle lock. When describing the Patent, Lockwood emphasised that it was never the original function of the outside actuator to deactivate the internal handle lock.
- 18 The specification of the Patent concludes by noting that "the present invention provides a relatively simple means for deactivating the knob locking mechanism from a position outside the door with which the latch assembly is associated". It was contended by Lockwood that when a key controlled latch which can be released from a locked condition by using a key or other member outside the door was added to a known lock assembly that constituted a combination which is a patentable invention.

- 12 (2003) 56 IPR 479 at 496-497 [76]-[77] per Wilcox J.
- **13** (2004) 217 CLR 274.
- 14 (2005) 226 ALR 70.

^{11 (2003) 56} IPR 479.

- The Patent has 33 claims and includes an independent claim and an omnibus claim. Only some claims are relevant to the determination of this appeal. Lockwood acknowledged that, as the primary judge held¹⁵, claims 1-6, as well as claims 12, 31 and 32, are invalid for lack of novelty. Those findings of the primary judge were not the subject of any appeal to the Full Court. However, the primary judge found that these same claims 1-6, 12, 31 and 32, were not invalid on the ground of obviousness¹⁶, having regard to what was known or used before the priority date of the claims, as determined under s 7(2) of the Act. The Full Court ordered that, subject to an extant stay, claims 1-6, 12-15, 20, 21, and 30-32 be revoked for lack of inventive step by reference to s 18(b)(ii) of the Act. It was noted in the orders of the Full Court that, in the event that its appeal to this Court was successful in relation to obviousness, Lockwood reserved its right to apply for leave to amend those claims of the Patent found to be invalid for lack of novelty at first instance, being claims 1-6, 12, 31 and 32¹⁷.
- In supplementary oral submissions on the appeal this Court was advised that there are no circumstances in which Lockwood would seek to amend claims 1-6, 12, 31 and 32.

The claims

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Claim 1 generally describes the invention. Throughout the proceedings below, it was convenient for claim 1 to be broken up into integers (i)-(vi), as follows:

"1. A latch assembly including, [(i)] a casing, [(ii)] a latch bolt mounted on the casing so as to be movable relative thereto between an extended latching position and a retracted release position, [(iii)] a first actuator operable from an inner side of the assembly to cause movement of the latch bolt to said release position, [(iv)] locking means operable from said inner side of the assembly to adopt an active condition and thereby render said first actuator inoperable, [(v)] a second actuator operable from an outer side of the assembly to cause movement of the latch bolt to the release position, and [(vi)] lock release means which is responsive to said operation of the second actuator so as to thereby render said locking means inactive."

Integer (vi) has been described throughout this litigation as the integer which embodies the "safety release mechanism".

- **16** (2001) 192 ALR 306 at 341 [197], 344 [216], 346 [226].
- 17 (2001) 192 ALR 306 at 352 [263].

¹⁵ (2001) 192 ALR 306 at 352 [263].

Claims 2-6 are dependent upon claim 1, and each successive claim adds a feature to those contained in the preceding claims. On appeal, it was acknowledged that the Lockwood 001 embodied integers (i)-(v), and that the new integer added through the Patent was integer (vi).

Claims 7-11 are preferred embodiment claims. Their validity has been upheld by this Court in relation to fair basing. Claims 7 and 8 have been found not to have been infringed¹⁸; claims 9-11 were not alleged to have been infringed¹⁹. Although not directly in issue in this appeal, claim 7 is significant because it refers to the cam member of the inside handle lock, which is the circular component of the handle lock that moves between the activated locked position, and the deactivated unlocked position. It states:

"7. A latch assembly according to any preceding claim, wherein said locking means includes a cam member which is movable between first and second positions at which said locking means is inactive and active respectively, cam biasing means urges said cam member towards said first position, and a retaining member is engagable with said cam member to thereby prevent movement of said cam member out of said second position when said locking means is in the active condition."

It was determined at first instance that claim 12 failed for lack of novelty²⁰. However, the primary judge found that claim 12 was not invalidated for lack of inventive step²¹. Claim 12 refers to a "detent means", which is a component which catches or prevents the movement of a mechanism. The "detent means" effects the "locking" of the inside handle lock. Claim 13, which refers to and builds upon claim 12, is the most significant claim for the purposes of this appeal concerning lack of inventive step. Claim 13 defines a "latch assembly" being a combination of extra integers, in addition to integers (i)-(vi):

> "[Claim 12] [(vii)] said locking means includes detent means which is movable between an actuator locking position and an actuator release position which correspond to said active and inactive conditions respectively of said locking means, and [(viii)] cam means which is operable to control which of said positions is adopted by said detent means.

- **18** (2001) 192 ALR 306 at 324 [83], 325 [86]; upheld by the Full Court: (2005) 226 ALR 70 at 80 [58], [60].
- **19** (2001) 192 ALR 306 at 325 [91].
- **20** (2001) 192 ALR 306 at 352 [263].
- **21** (2001) 192 ALR 306 at 343 [212].

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[Claim 13] [(ix)] said cam means includes a cam of [sic] which is movable about an axis of rotation between first and second positions of rotation so as to thereby control [(x)] said detent means, and said detent means includes at least one detent which moves substantially radially of said cam axis when moving between said actuator locking and release positions."

Claim 14 depends upon claim 13, as 15 does on 14.

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Claims 16-19 and 22-29 also contain preferred embodiments of the Patent but they were not in issue as they were not the subject of any challenge alleging lack of inventive step. Either they were found not to have been infringed (claims 17, 22 and 23)²², or they were not alleged to have been infringed (claims 16, 18, 19, 24-29)²³. These claims do not bear significantly on the determination of this appeal. Claims 20 and 21 are dependent on claims 14-19, but only claim 20 was found to have been infringed by Doric's products²⁴. While the primary judge determined that claims 20 and 21 were not obvious²⁵, the Full Court ordered they both be revoked for lack of inventive step. Claim 20 describes the relationship between the detent and the actuator member, and their engagement when in the locking position.

According to Lockwood, the validity of claim 30 in respect of an inventive step rises or falls with claim 13: claim 30 refers to a latch assembly according to claims 13-29 in which the "cam axis is substantially coincident with [the] actuator member axis". Like claims 1-6, claims 31 and 32 have been found to be invalid for lack of novelty. Claim 33 is an omnibus claim, which was determined not to be infringed, and which incorporates 11 detailed mechanical figures which illustrate the constituent components, assembly, and operation of latch assemblies within the Patent.

In this appeal, Lockwood seeks an injunction restraining infringement of claims 13-15, 20 and 30²⁶. The significant feature of claims 13-15, 20 and 30 is that they describe particular mechanical components of the lock and the relationships between those components which effect the deactivation of the internal handle lock via the outside actuator.

- **22** (2001) 192 ALR 306 at 326 [98], [103], 327 [105]; upheld by the Full Court: (2005) 226 ALR 70 at 82 [74], [75].
- **23** (2001) 192 ALR 306 at 325 [93], 326 [99], 327 [106].
- **24** (2001) 192 ALR 306 at 326 [100]-[101].
- **25** (2001) 192 ALR 306 at 343 [212].
- **26** Infringement was not alleged in respect of claim 21: (2001) 192 ALR 306 at 326 [101].

In its notice of appeal to this Court, Lockwood asserted that the Full Court erred in concluding that claims 1-6, 12-15, 20, 21 and 30-32 lacked an inventive step. In support of this, Lockwood argued that the Full Court erred in finding claim 1 and dependent claims obvious on the basis of an "implicit 'corollary' admission" said to have been made in the specification of the Patent and without evidence to support such a finding. As described in greater detail below, Lockwood did not distinguish between the broader claims and the narrower claims for the purposes of this argument. It was also contended that the Full Court erred in applying s 7(3) when assessing inventive step under s 18(1)(b)(ii) of the Act, in particular by including storeroom locks as relevant within the meaning of s 7(3). The question of whether the invention involves an inventive step when compared with the prior art base. Claims 14 and 15, 20, 21 and 30 would rise or fall with claim 13.

Section 7(3) of the Act operates differently in relation to the broader claim 1 and the narrower claim 13. On the evidence, different results are reached on the questions of whether the invention disclosed in each of the combinations in these two claims would have been obvious to a person skilled in the relevant art. The narrow claim is not obvious and so is valid. In the reasons which follow it is not necessary to determine that the broad claim 1 of the Patent is invalid for lack of inventive step as well as for want of novelty. However, that conclusion is apparent from the determination that the narrower claim 13 involves an inventive step, over a prior art base which does not include all of the art to be considered when determining whether claim 1 involves an inventive step.

Before dealing with the specific operation of s 7(3) of the Act, it is necessary to describe in detail the Patent and its claims and the development of the requirement for a patent to involve an inventive step over prior art. It will then be necessary to examine the reasons of the courts below on the issue of obviousness and the particular evidence received in relation to the claims of the Patent.

The legislative scheme

Doric's claim of invalidity relies on s 138 of the Act. A person can apply to "a prescribed court", which includes the Federal Court of Australia, for an order revoking a patent. The ground upon which Doric relies in this case is set out in s 138(3)(b) – that the invention was not "a patentable invention".

³² Under s 18(1) of the Act, as applicable at the relevant time²⁷, "a patentable invention is an invention that, so far as claimed in any claim":

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- "(a) is a manner of manufacture within the meaning of section 6 of the Statute of Monopolies; and
- (b) when compared with the prior art base as it existed before the priority date of that claim:

(i) is novel; and

(ii) involves an inventive step".

33 The applicable sub-sections of s 7 of the Act, as in force at the relevant time, provided:

- "(2) For the purposes of this Act, an invention is to be taken to involve an inventive step when compared with the prior art base unless the invention would have been obvious to a person skilled in the relevant art in the light of the common general knowledge as it existed in the patent area before the priority date of the relevant claim, whether that knowledge is considered separately or together with either of the kinds of information mentioned in subsection (3), each of which must be considered separately.
- (3) For the purposes of subsection (2), the kinds of information are:
 - (a) prior art information made publicly available in a single document or through doing a single act; and
 - (b) prior art information made publicly available in 2 or more related documents, or through doing 2 or more related acts, if the relationship between the documents or acts is such that a person skilled in the relevant art in the patent area would treat them as a single source of that information;

being information that the skilled person mentioned in subsection (2) could, before the priority date of the relevant claim, be reasonably expected to have ascertained, understood and regarded as relevant to work in the relevant art in the patent area."²⁸

At the time relevant to this case, "prior art base" was defined in Sched 1 to the Act to mean:

²⁸ These sub-sections have since been amended by the *Patents Amendment (Innovation Patents) Act* 2000 (Cth), which incorporated sections regarding innovation patents, and the *Patents Amendment Act* 2001 (Cth), which removed and substituted terms from s 7(2) and repealed and replaced s 7(3).

- "(i) information in a document, being a document publicly available anywhere in the patent area; and
- (ii) information made publicly available through doing an act anywhere in the patent area."²⁹

The person skilled in the relevant art in this case is a lock designer. Under the provisions the question of whether an invention does not involve an inventive step on grounds of obviousness, is decided objectively by the application of a statutory test employing the standard of "a person skilled in the relevant art". "Prior art information" is also determined objectively by the application of a statutory test involving the same standard.

The question

Claim 1 has been the subject of an order for revocation for want of novelty by the primary judge. The question to be resolved in this appeal is whether, when compared with the prior art base as at the priority date of 14 February 1996, the invention which is the subject matter of claim 13 (and dependent claims 14, 15, 20, 21 and 30^{30}) of the Patent involves an inventive step as required by s 18(1)(b)(ii) of the Act. That calls for determination of whether the invention claimed was obvious, and did not involve an inventive step, having regard to common general knowledge, whether considered separately or considered together with the kind of prior art information described in s 7(3).

The inventive step in the Patent

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Both Lockwood and Doric characterised the inventive step as the adding of integer (vi), "lock release means which is responsive to said operation of the

- **29** This definition has been amended by the *Patents Amendment Act* 2001 (Cth), such that "prior art base" now means:
 - "(a) in relation to deciding whether an invention does or does not involve an inventive step or an innovative step:
 - (i) information in a document, that is publicly available, whether in or out of the patent area; and
 - (ii) information made publicly available through doing an act, whether in or out of the patent area."
- **30** In this appeal Lockwood sought an injunction based on claims 13-15, 20 and 30 of the Patent and Doric sought the revocation of claims 13-15, 20, 21 and 30 of the Patent. Infringement was not alleged in respect of claim 21: (2001) 192 ALR 306 at 326 [101].

second actuator so as to thereby render said locking means inactive", to a known product, the Lockwood 001, which contained integers (i)-(v).

It seemed to be accepted by Lockwood that the inventive step was the same 37 for the broad claim, claim 1, as it was for the narrower claim, claim 13, the claim at the centre of this appeal, which included integers (vii) and (viii) set out in claim 12 as well as integers (ix) and (x). Lockwood did not identify a separate inventive step by reference to the combination of integers in claim 13, while it sought to reserve its rights in respect of the broader claim, claim 1³¹. At the outset of the appeal there was no suggestion in argument that claim 13 and claims dependent on it could or should be severed from the main claim, claim 1³². That may be explained, at least in part, by the statement in the Full Court that the two extra integers of claim 13, integers (ix) and (x), "saved it from lack of novelty, but [they] are both part of common general knowledge."³³ However, in supplementary written and oral submissions Lockwood accepted that when a court is considering whether a claim is obvious, a narrow claim in a specification may be treated differently from a broad claim. Doric did not disagree with that general proposition, as, for example, when a narrow claim defines the invention by use of more integers³⁴, as can be observed in claim 7.

The historical development of the requirement for an inventive step

- It is important to refer to some basic principles that were engaged in this matter. These are principles that have been stated or referred to in earlier decisions, particularly decisions of this Court. We do not intend, however, and are not to be taken as suggesting, any reinterpretation of what was decided in those cases. Nonetheless, the recognition and application of these basic principles is fundamental to a proper understanding of the issues that arose in the litigation between the parties.
- 39 Lack of novelty as a ground for invalidating a patent had its origins in the United Kingdom through the *Statute of Monopolies*³⁵ enacted in 1623, which provided for the grant of Letters Patent for the "sole working or making of any manner of new manufactures" to the "true and first inventor". Within this context, novelty embraced not only the issue of anticipation, but also the issue of whether
 - 31 Brugger v Medic-Aid Ltd [1996] RPC 635 at 656 per Laddie J.
 - 32 cf Raleigh Cycle Co Ltd v H Miller & Co Ltd (1949) 66 RPC 253.
 - **33** (2005) 226 ALR 70 at 91 [111(e)].
 - $34 \quad \text{See s } 40(2)(b) \text{ of the Act.}$
 - **35** 21 Jac 1 c 3, s 6.

a thing produced required "some exertion of mind that could properly be called invention"³⁶.

40 Obviousness, or lack of an inventive step, was not clearly recognised as a separate ground of invalidity until late in the 19th century when a contemporary writer stated that the ground of invalidity emerged "as a brake upon the too rapid progress of patents for analogous uses"³⁷. This development continued early in the 20th century³⁸. It became commonplace to note in the cases that, in addition to novelty, it is necessary to ask separately whether an invention is "ingenious"³⁹, or to recognise as Lockhart J said much more recently in *R D Werner & Co Inc v Bailey Aluminium Products Pty Ltd*⁴⁰ ("*R D Werner*"):

"Invention means more than novelty. Novelty alone will not sustain a patent."

The historical development of the distinction between novelty and obviousness, identified by Windeyer J in Sunbeam Corporation v Morphy-Richards (Aust) Pty Ltd⁴¹, is explained by Aickin J in Minnesota Mining and Manufacturing Co v Beiersdorf (Australia) Ltd⁴² ("Minnesota Mining"). That explanation is amplified by Lockhart J and Gummow J in R D Werner⁴³ and

- **36** *Tatham v Dania* (1869) Griffin Pat Cas 213 at 214 per Willes J. See also *Morgan & Co v Windover & Co* (1890) 7 RPC 131 at 134 per Lord Halsbury LC.
- **37** Edmunds, *The Law and Practice of Letters Patent for Inventions*, 2nd ed (1897) at 84.
- **38** Blanco White, *Patents for Inventions and the Protection of Industrial Designs*, 5th ed (1983) at 55.
- 39 Cunynghame, English Patent Practice, (1894) at 77; Roberts, The Grant and Validity of British Patents for Inventions, (1903) at 37. See also Britain v Hirsch (1888) 5 RPC 226 at 232 per Cotton LJ: there must be "sufficient invention to justify a monopoly"; Cole v Saqui (1888) 6 RPC 41 at 44 per Lindley LJ: there must be some "ingenuity in that which is new"; and The Edison Bell Phonograph Corporation Limited v Smith (1894) 11 RPC 389 at 398 per Lord Esher MR: it must not be "so easy that any fool could do it".
- **40** (1989) 25 FCR 565 at 574.

- **41** (1961) 180 CLR 98 at 111-112.
- **42** (1980) 144 CLR 253 at 289-291.
- **43** (1989) 25 FCR 565 at 573-575, 594-601 respectively.

reiterated in this Court in Aktiebolaget Hässle v Alphapharm Pty Limited⁴⁴ ("Alphapharm").

- Briefly, the first Australian patent legislation, the *Patents Act* 1903 (Cth), imported into Australian law the principles in place in the United Kingdom. "Invention" was defined to mean "any manner of new manufacture the subject of letters patent and grant of privilege within section six of the Statute of Monopolies"⁴⁵. Consonant with the cognate United Kingdom legislation, revocation by *scire facias* essentially a writ to show cause could be ordered upon a person's petition to the relevant court on the basis of any ground which would have been available at common law⁴⁶.
 - The *Patents and Designs Act* 1932 (UK) introduced a consolidated list of grounds for the revocation of a patent⁴⁷. One of the grounds provided that a patent could be revoked if the invention was not new⁴⁸; but a further ground of revocation could be invoked if the invention "is obvious and does not involve any inventive step having regard to what was known or used prior to the date of the patent"⁴⁹. That constituted a different formulation of the old ground of "want of subject matter" with the test becoming an overtly qualitatively test rather than a quantitative one.

Although the Knowles Committee was established in 1935 to consider changes to Australian patent law in the light of these developments in the United Kingdom, it was not until the recommendation of the Dean Committee in 1952⁵⁰

- 44 (2002) 212 CLR 411 at 422-423 [19]-[20] per Gleeson CJ, Gaudron, Gummow and Hayne JJ.
- **45** *Patents Act* 1903 (Cth), s 4.
- 46 Patents Act 1903 (Cth), s 86(3). See also, for example, the Patents, Designs, and Trade Marks Act 1883 (UK) 46 & 47 Vict c 57, s 26. Following changes made in the Patents and Designs Act 1907 (UK), the Patents Act 1909 (Cth) was passed in Australia.
- 47 Section 3 inserted a new s 25(2) into the *Patents and Designs Act* 1907 (UK).
- 48 Section 25(2)(e).
- **49** Section 25(2)(f). This ground was later amended by the *Patents and Designs Act* 1949 (UK): s 14(1) inserted a new s 25 into the *Patents and Designs Act* 1907 (UK), including s 25(1)(f), such that a patent could be revoked if "the invention ... is obvious and does not involve any inventive step having regard to what was known or used, before the priority date of the claim, in the United Kingdom".
- **50** The report of the Knowles Committee was contained in the report of the later Dean Committee: *Report of the Committee Appointed by the Attorney-General of the*

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that the *Patents Act* 1952 (Cth) ("the 1952 Act") was passed. That legislation implemented similar changes in Australia, including a consolidated list of grounds for revocation. This legislation contained s 100(1)(e), which provided for revocation if a claim "was obvious and did not involve an inventive step, having regard to what was *known or used* in Australia on or before the priority date of that claim" (emphasis added).

This was the first legislative recognition in Australia that obviousness, or lack of inventive step, constituted a ground of revocation which was independent of lack of novelty, despite the fact that such a distinction had been made in legislation in the United Kingdom nearly 20 years earlier. The Act which governs the Patent here commenced on 30 April 1991, and introduced ss 7 and 18. Now the current requirements for an inventive step differ from those to be found in s 100(1)(e) of the 1952 Act, as explicated in *Minnesota Mining*⁵¹. In 1991 the legislature raised the threshold of inventiveness, compared with the 1952 Act, by requiring consideration not only of what was "known or used" but also of additional information which was publicly available. These provisions will be considered in more detail later in these reasons.

Although *Alphapharm* was decided in relation to a patent registered under the 1952 Act, what was said in the reasons of the majority in that case about the historical development of the law in relation to obviousness and the requirement for an inventive step is relevant and applicable to the current law of obviousness in Australia⁵². Particular note may be made of the warning in *Alphapharm* against the misuse of hindsight in relation to patents which are a new and inventive combination of known integers⁵³. In *Alphapharm*, the majority of this Court drew attention to the divergence between the Australian and the United Kingdom patent systems⁵⁴ and of the "shift in grundnorm"⁵⁵ concerning inventiveness which has occurred in the United Kingdom, following the Convention on the Grant of

Commonwealth to Consider what Alterations are Desirable in The Patent Law of the Commonwealth, 1952.

- **51** (1980) 144 CLR 253 at 287ff per Aickin J.
- **52** (2002) 212 CLR 411 at 427 [33]ff.

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- 53 (2002) 212 CLR 411 at 423-424 [21], with reference to *Technograph Printed Circuits Ltd v Mills & Rockley (Electronics) Ltd* [1972] RPC 346 at 362 per Lord Diplock, and also *Olin Corporation v Super Cartridge Co Pty Ltd* (1977) 180 CLR 236 at 262 per Stephen and Mason JJ. See also *Minnesota Mining* (1980) 144 CLR 253 at 293 per Aickin J.
- **54** (2002) 212 CLR 411 at 429 [42]ff.
- **55** (2002) 212 CLR 411 at 432 [49].

European Patents in 1973 and the subsequent enactment of the *Patents Act* 1977 (UK)⁵⁶.

- A similar development in relation to obviousness took place in the United States. The patent regime there originated from the English system; however, since the passing of the first patent statute in 1790⁵⁷, a number of divergences have occurred. The most recent codification is the *Patent Act* 1952 (US)⁵⁸. Although primarily restating the law as it stood up to that point in time, it also introduced the concept of "non-obviousness" as a legislative requirement for patentability in § 103. This took place in circumstances where obviousness had been recognised and applied in courts as early as 1850⁵⁹.
 - The emergence of the independent requirement for an inventive step, first in case law, then in legislative requirements for patentability as occurred in the United Kingdom, the United States and Australia, has always reflected the balance
 - 56 Pumfrey J in *Glaxo Group Ltd's Patent* [2004] RPC 43 has responded to those passages in *Alphapharm* thus (at 858 [41]):

"Both the Scylla of considering nothing obvious except that to which the skilled man is driven and the Charybdis of considering every invention obvious that can be decomposed into a sequence of obvious steps must be avoided. The former is unfair to industry because it stifles natural development. The latter is unfair to inventors and not countenanced by English patent law".

- 57 Patent Act 1790 (US) 1 Stat 109.
- 58 35 USC.
- 59 Hotchkiss v Greenwood 52 US 248 at 266 (1850), in which it was determined that while the claimed invention was "new" in that it had not been made using its particular constituent materials before, it was "destitute of ingenuity or invention". See also Graham v John Deere Co of Kansas City 383 US 1 at 17-18 (1966), where the Supreme Court addressed four considerations under the rubric of nonobviousness: the extent of the prior art; the degree of difference between the prior art and the claimed invention; the level of skill of the ordinary worker in the industry; and evidence of secondary considerations such as a long felt want in the industry, or commercial success. The continuing authority of John Deere was affirmed by the Supreme Court in KSR International Co v Teleflex Inc (30 April 2007); the Court also disapproved recent Federal Circuit decisions that a combination claim is obvious only if the prior art, the nature of the problem to be solved or the knowledge of the ordinary skilled worker in the art, reveals "some teaching, suggestion, or motivation" to combine known elements of the prior art. See also Moy's Walker on Patents, 4th ed (2006), vol 3, ch 9; Federico, "Commentary on the New Patent Act", (1993) 75 Journal of the Patent and Trademark Office Society 161 at 180-183; and Federico, "Origins of Section 103", (1977) 5 American Patent Law Association Quarterly Journal 87.

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of policy considerations in patent law of encouraging and rewarding inventors without impeding advances and improvements by skilled, non-inventive persons⁶⁰. The terms of ss 7(2), 7(3) and 18(1)(b)(ii) of the Act, and the different but cognate sections in the *Patents Act* 1977 (UK), reflect the intention of both legislatures to "rebalance" those policy considerations, by raising the threshold of inventiveness.

49 Previously, only common general knowledge was taken into account when assessing an inventive step. Now, additional information which was publicly available as at the priority date must also be taken into account. Broadly speaking, s 7(3) has as its purpose the specification of the additional publicly available information ("s 7(3) information") which must be added to common general knowledge for the purposes of deciding whether an alleged invention is obvious when compared with the prior art base.

General principles concerning inventive step

- 50 Although the threshold of inventiveness has been raised as explained by the legislative changes referred to above, case law developed previously continues to be relevant, not least because the legislation employs many familiar terms, such as "common general knowledge". That makes it necessary to briefly refer to general principles of continuing relevance before turning to consider the legislative provisions in more detail.
- In *Alphapharm*, this Court reiterated that "obvious" means "very plain"⁶¹, as stated by the English Court of Appeal in *General Tire & Rubber Co v Firestone Tyre and Rubber Co Ltd*⁶². The majority in *Alphapharm* also confirmed that the question of whether an invention is obvious is a question of fact, that is, it is what was once a "jury question"⁶³. Broadly speaking, the question is not a question of what is obvious to a court⁶⁴. As well as being a question of fact, the question of determining whether a patent involves an inventive step is also "one of degree and
 - **60** Société Technique de Pulverisation Step v Emson Europe Ltd [1993] RPC 513 at 519 per Hoffmann LJ.
 - 61 (2002) 212 CLR 411 at 427 [34] per Gleeson CJ, Gaudron, Gummow and Hayne JJ, 444 [85] per McHugh J, 463 [144] per Kirby J, 477 [190] per Callinan J.
 - **62** [1972] RPC 457 at 497.
 - **63** (2002) 212 CLR 411 at 443 [79].
 - 64 Technograph Printed Circuits Ltd v Mills & Rockley (Electronics) Ltd [1972] RPC 346 at 355 per Lord Reid.

often it is by no means easy"⁶⁵, because ingenuity is relative, depending as it does on relevant states of common general knowledge. This difficulty is further complicated now by the need, in some circumstances, to consider s 7(3) information as well as common general knowledge.

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Further, as recognised in *Beecham Group Ltd's (Amoxycillin) Application*⁶⁶, as a basic premise, obviousness and inventiveness are antitheses and the question is always "is the step taken over the prior art an 'obvious step' or 'an inventive step"? An inventive step is often an issue "borne out by the evidence of the experts"⁶⁷. There is no distinction between obviousness and a lack of inventive step⁶⁸. A "scintilla of invention"⁶⁹ remains sufficient in Australian law to support the validity of a patent⁷⁰. In *R D Werner* Lockhart J stated that there must be "some difficulty overcome, some barrier crossed"⁷¹. This is consonant with older authorities in the United Kingdom which recognised that some inventiveness was required⁷² to distinguish patentable advances over the prior art from advances

- 65 See John McIlwraith Industries Ltd v Phillips (1958) 98 CLR 529 at 536 per Dixon CJ; Alphapharm (2002) 212 CLR 411 at 427 [33] citing Société Technique de Pulverisation Step v Emson Europe Ltd [1993] RPC 513 at 519 per Hoffmann LJ.
- 66 [1980] RPC 261 at 290 per Buckley LJ, as referred to in the majority reasons of this Court in *Alphapharm* (2002) 212 CLR 411 at 423 [20]; cf *Genentech Inc's Patent* [1989] RPC 147 at 274 per Mustill LJ.
- 67 Raleigh Cycle Co Ltd v H Miller & Co Ltd (1946) 63 RPC 113 at 136 per Lord Greene MR.
- 68 Benmax v Austin Motor Co Ltd (1953) 70 RPC 284 at 288 per Evershed MR.
- 69 Woolworths Ltd v W B Davis and Son Ltd Inc (1942) 16 ALJ 57 at 59 per Williams J.
- 70 Alphapharm (2002) 212 CLR 411 at 431 [48], referring to HPM Industries Pty Ltd v Gerard Industries Ltd (1957) 98 CLR 424 at 436 per Williams J. See also Meyers Taylor Pty Ltd v Vicarr Industries Ltd (1977) 137 CLR 228 at 249 per Aickin J. It was also noted in Alphapharm that the present position in the United Kingdom may require something more than a "scintilla of invention", which was once sufficient. See, for example, Thomson v The American Braided Wire Company (1889) 6 RPC 518 at 527-528 per Lord Herschell; for a more recent example, see Cleveland Graphite Bronze Coy v Glacier Metal Coy Ld (1950) 67 RPC 149 at 156 per Lord Normand.
- (1989) 25 FCR 565 at 574; see also Allsop Inc v Bintang Ltd (1989) 15 IPR 686 at 701 per Bowen CJ, Beaumont and Burchett JJ; Elconnex Pty Ltd v Gerard Industries Pty Ltd (1992) 25 IPR 173 at 182 per Lockhart J.
- 72 Vickers, Sons & Co v Siddell (1890) 15 App Cas 496 at 501-502 per Lord Herschell.

which "any fool"⁷³ could devise. It also accords with the requirement in the United States that for an invention to be "non-obvious"⁷⁴ it must be "beyond the skill of the calling"⁷⁵.

The essential question to be posed when considering obviousness under the 1952 Act was outlined by Aickin J in *Wellcome Foundation Ltd v VR Laboratories* (*Aust*) *Pty Ltd*⁷⁶ ("*Wellcome Foundation*"). Section 101(1) of the 1952 Act set out the grounds upon which a patent might be revoked. Section 101(1)(e) relevantly provided:

"that the invention, so far as claimed in any claim, was obvious and did not involve an inventive step, having regard to what was *known or used* in Australia on or before the priority date of that claim." (emphasis added)

In considering whether experiments by an inventor were relevant to the issue of obviousness, in *Wellcome Foundation*, Aickin J⁷⁷ stated:

"It is as well to bear in mind that the question of obviousness involves asking the question whether the invention would have been obvious to a non-inventive worker in the field, equipped with the *common general knowledge* in that *particular field* as at the priority date, *without regard to documents in existence but not part of such common general knowledge*." (emphasis added)

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"Common general knowledge" was well understood as being "part of the mental equipment of those concerned in the art under consideration"⁷⁸, and *Minnesota Mining* had confirmed that what was "known or used" in Australia was confined to common general knowledge, which was explained as⁷⁹:

- 73 *The Edison Bell Phonograph Corporation Limited v Smith* (1894) 11 RPC 389 at 398 per Lord Esher MR.
- 74 Patents Act 1952 (US), § 103.
- 75 Graham v John Deere Co of Kansas City 383 US 1 at 15 (1966), as referred to in Allsop Inc v Bintang Ltd (1989) 15 IPR 686 at 701 per Bowen CJ, Beaumont and Burchett JJ, and Leonardis v Sartas No 1 Pty Ltd (1996) 67 FCR 126 at 146 per Burchett, Hill and Tamberlin JJ.
- 76 (1981) 148 CLR 262.
- 77 (1981) 148 CLR 262 at 270, with whom Gibbs, Stephen, Mason and Wilson JJ agreed.
- 78 Lektophone Corporation v S G Brown Ltd (1929) 46 RPC 203 at 225.
- 79 (1980) 144 CLR 253 at 292 per Aickin J.

"the background knowledge and experience which is available to all in the trade in considering the making of new products, or the making of improvements in old".

The effect of *Minnesota Mining* and *Wellcome Foundation* was that for the purpose of determining inventiveness prior disclosures which were publicly available information, but which were not part of common general knowledge, were excluded from consideration. In the case of *Minnesota Mining*, a number of prior specifications available for public inspection in Australia before the priority date which were not part of common general knowledge were excluded from consideration.

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Whether a patent is obvious under the Act is still to be determined by reference to the hypothetical non-inventive worker in the field (now a "person skilled in the relevant art" (ss 7(2) and 7(3)) equipped with common general knowledge, as stated by Aickin J in *Minnesota Mining* and followed since⁸⁰. Therefore it is irrelevant whether the invention was arrived at as a matter of chance or luck or the result of long experiment or great intellectual effort⁸¹. However, reference to and use of prior disclosures, in existence but not part of the common general knowledge, has now been extended. This has the result that the limitation in Aickin J's statement of principle, emphasised above, no longer applies, a topic about which more will be said later. The objective approach to determining obviousness is equally applicable to a combination patent⁸².

As to the position in the United Kingdom, in *Technograph Printed Circuits* Ltd v Mills & Rockley (Electronics) Ltd⁸³, Lord Reid construed the phrase "having

- Alphapharm (2002) 212 CLR 411; Firebelt Pty Ltd v Brambles Australia Ltd (2002)
 76 ALJR 816; 188 ALR 280; see also, for example, Elconnex Pty Ltd v Gerard Industries Pty Ltd (1992) 25 IPR 173; Allsop Inc v Bintang Ltd (1989) 15 IPR 686.
- 81 Advanced Building Systems Pty Ltd v Ramset Fasteners (Aust) Pty Ltd (1998) 194 CLR 171 at 187 [25] per Brennan CJ, Gaudron, McHugh and Gummow JJ; Wellcome Foundation (1981) 148 CLR 262 at 279 per Aickin J, citing Dow Corning Corporation's Application [1969] RPC 544 at 560 per Graham J; see also Flexible Steel Lacing Company v Beltreco Ltd (2000) 49 IPR 331 at 367 [166] per Hely J; and Crane v Price (1842) 4 Man & G 580 at 605 [134 ER 239 at 249] per Tindal CJ delivering the judgment of the Court.
- 82 *Alphapharm* (2002) 212 CLR 411 at 429 [41]; *Minnesota Mining* (1980) 144 CLR 253 at 293 per Aickin J.
- 83 [1972] RPC 346.

regard to what was *known or used*, before the priority date"⁸⁴ as meaning "what was or ought to have been known to a diligent searcher"⁸⁵. Lord Diplock went further than that and accepted that the words meant everything in the public domain, which in that case included patent specifications in the United Kingdom, as well as foreign ones which were available in the Patent Office⁸⁶.

Lord Reid's construction was preferred and approved in *General Tire & Rubber Co v Firestone Tyre and Rubber Co Ltd*⁸⁷, but s 2(2) of the *Patents Act* 1977 (UK) now provides that the "state of the art" for the purposes of determining obviousness includes everything in the public domain:

"all matter (whether a product, a process, information about either, or anything else) which has at any time before the priority date of the invention been made available to the public (whether in the United Kingdom or elsewhere) by written or oral description, by use or in any other way."

Patentability of ideas

For the purposes of considering this Patent and its treatment in the Courts below, it is instructive to start with an old but frequently repeated description of the processes of invention by Fletcher Moulton⁸⁸:

"An invention may, and usually does, involve three processes. Firstly, the definition of the problem to be solved or the difficulties to be overcome; secondly, the choice of the general principle to be applied in solving this problem or overcoming these difficulties; and thirdly, the choice of the particular means used. Merit in any one of these stages, or in the whole combined, may support the invention"⁸⁹.

- 84 Section 32(1)(f) of the *Patents Act* 1949 (UK) (emphasis added), which was cognate with s 100(1)(e) of the 1952 Act.
- **85** [1972] RPC 346 at 355.
- **86** [1972] RPC 346 at 361.
- **87** [1972] RPC 457 at 497.
- **88** Fletcher Moulton, *The Present Law and Practice Relating to Letters Patent for Inventions*, (1913) at 24 (footnotes omitted).
- **89** See also Australian Patent Office, *Patent Office Notes on the History of the British and Commonwealth Patent Acts and the Law Relating to Letters Patent of Inventions in Australia*, 5th ed (1974) at 23-24.

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Distinctions between the *idea* or concept or principle informing an invention and the *means* of carrying it out or embodying it in a manner of new manufacture have long been made despite certain expressions of caution from time to time⁹⁰. In *Hickton's Patent Syndicate v Patents and Machine Improvements Company Ltd*⁹¹, Fletcher Moulton LJ stated that "invention may lie in the idea, and it may lie in the way in which it is carried out, and it may lie in the combination of the two"⁹².

In a sense, an idea *simpliciter* cannot be patented, as no patent will be granted except to a manner of manufacture within s 6 of the *Statute of Monopolies*. An idea which is part, even the main part, of an inventive step "has got to end in a new method of manufacture"⁹³. When an idea is incorporated into a means for carrying out an idea, the idea itself can be taken into account when considering validity, and inventiveness may repose largely in the idea. As a matter of language, it is almost inevitable that the subject matter of an invention which involves an improvement to a known combination will be spoken of as "an idea" or "a concept", as occurred here, and invention may lie in "the idea of taking the step in question"⁹⁴. To the extent that such language is used, an inventive step can be "having an insight which, although simple, genuinely requires an act of insight rather than a mere development and application of existing ideas"⁹⁵.

In dealing with a question of obviousness under the *Patents Act* 1949 (UK) in *Windsurfing International Inc v Tabur Marine (Great Britain) Ltd*⁹⁶ Oliver LJ isolated the "inventive concept" when he set out a four-step process to be taken when approaching the question of obviousness⁹⁷:

- 90 See, for example, Blanco White, *Patents for Inventions and the Protection of Industrial Designs*, 5th ed (1983) at 95-96.
- **91** (1909) 26 RPC 339.

92 (1909) 26 RPC 339 at 348.

- **93** In re IG Farbenindustrie AG's Patents (1930) 47 RPC 289 at 309 per Maugham J (in argument).
- **94** Olin Mathieson Chemical Corporation v Biorex Laboratories Ltd [1970] RPC 157 at 192 per Graham J; see generally *Terrell on the Law of Patents*, 16th ed (2006) at 276-277.
- **95** Molnlycke AB v Procter & Gamble Ltd (No 5) [1994] RPC 49 at 132 per Nicholls VC, delivering the judgment of the Court.
- 96 [1985] RPC 59.
- **97** [1985] RPC 59 at 73-74.

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"The first [step] is to identify the *inventive concept* embodied in the patent in suit. Thereafter, the court has to assume the mantle of the normally skilled but unimaginative addressee in the art at the priority date and to impute to him what was, at that date, common general knowledge in the art in question. The third step is to identify what, if any, differences exist between the matter cited as being 'known or used' and the alleged invention. Finally, the court has to ask itself whether, viewed without any knowledge of the alleged invention, those differences constitute steps which would have been obvious to the skilled man or whether they require any degree of invention." (emphasis added)

The "inventive concept" is important for what has come to be regarded in the United Kingdom as a "structured"⁹⁸ approach to determining obviousness under the current statutory definition⁹⁹. In *Biogen Inc v Medeva plc*¹⁰⁰ Lord Hoffmann said:

"A proper statement of the *inventive concept* needs to include some express or implied reference to the problem which it required invention to overcome." (emphasis added)

As noted in *Alphapharm*¹⁰¹, that statement may reflect the "problem and solution" approach apparently mandated by the European Patent Convention. That "problem and solution" approach has the inevitable effect that an idea which constitutes an addition to the existing stock of knowledge needs to be specifically characterised as an idea of doing a new thing, or an idea of the way of achieving a previously known goal, or the idea of a particular solution in relation to achieving a certain goal¹⁰².

- **98** Molnlycke AB v Procter & Gamble Ltd (No 5) [1994] RPC 49 at 115 per Nicholls VC, delivering the judgment of the Court.
- **99** By s 1(1)(b) of the *Patent Act* 1977 (UK), a patent may only be granted for an invention if it involves an "inventive step", and s 3 provides: "An invention shall be taken to involve an inventive step if it is not obvious to a person skilled in the art, having regard to any matter which forms part of the state of the art by virtue only of section 2(2) above (and disregarding section 2(3) above)". Section 130(7) provides that various provisions including ss 2 and 3 are framed so as to have the same effects as corresponding provisions of the European Patent Convention, the Community Patent Convention and the Patent Co-operation Treaty.
- **100** [1997] RPC 1 at 45.
- **101** (2002) 212 CLR 411 at 429 [40].
- 102 Biogen Inc v Medeva plc [1997] RPC 1 at 34 per Lord Hoffmann.

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Although the recognition of the need to identify an "inventive idea" justifying a monopoly is not new in Australia¹⁰³, the developments in the United Kingdom, which emphasise the need to identify the "inventive concept" in terms of "problem and solution", have raised the threshold of inventiveness. This has been exemplified by a number of relevant English cases since 1977¹⁰⁴.

Such developments were considered and distinguished in Alphapharm¹⁰⁵. This Court rejected confining the question of obviousness to a "problem and solution" approach, particularly with a combination patent. This should not be The "problem and solution" approach¹⁰⁶ may overcome the misconstrued. difficulties of an ex post facto analysis of an invention, which may be unhelpful in resolving the question of obviousness¹⁰⁷. However, it is worth repeating that the "problem and solution" approach may be particularly unfair to an inventor of a combination, or to an inventor of a simple solution¹⁰⁸, especially as a small amount of ingenuity can sustain a patent in Australia. Ingenuity may lie in an idea for overcoming a practical difficulty in circumstances where a difficulty with a product consisting of a known set of integers is common general knowledge¹⁰⁹. This is a narrow but critical point if, as here, the circumstances are that no skilled person in the art called to give evidence had thought of a general idea or general method of solving a known difficulty with respect to a known product, as at the priority date.

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When considering the patentability of ideas it is necessary to remember that a "manner of manufacture" requires "something of a corporeal and substantial nature"¹¹⁰. The expansion of "a manner of new manufacture" through case law

- **103** Commissioner of Patents v Microcell Ltd (1959) 102 CLR 232 at 249 per Dixon CJ, McTiernan, Fullagar, Taylor and Windeyer JJ.
- **104** See for example, *Haberman v Jackel International Ltd* [1999] FSR 683 at 706 [45] per Laddie J; *Glaxo Group Ltd's Patent* [2004] RPC 43.
- **105** (2002) 212 CLR 411 at 428-429 [38]-[40].
- 106 HPM Industries Pty Ltd v Gerard Industries Ltd (1957) 98 CLR 424 at 437 per Williams J.
- 107 Meyers Taylor Pty Ltd v Vicarr Industries Ltd (1977) 137 CLR 228.
- 108 Haberman v Jackel International Ltd [1999] FSR 683 at 698 [29] per Laddie J.
- 109 Molnlycke AB v Procter & Gamble Ltd (No 5) [1994] RPC 49.
- 110 *R v Wheeler* (1819) 2 B & Ald 345 at 350 [106 ER 392 at 395] per Abbott CJ.

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which has been "characteristic of the growth of patent law"¹¹¹ came to rest with the acknowledgment in *National Research Development Corporation v Commissioner* of *Patents* ("the *NRDC* case")¹¹² that any attempt to fetter the exact meaning of "a manner of new manufacture" could never be sound¹¹³.

Obviousness and claim 1

The question of obviousness and claim 1 was central to the way this case was put before the primary judge and the Full Court. Whilst no rights are reserved now by Lockwood in respect of applying in the future to amend claim 1 (which was ordered to be revoked by the primary judge for lack of novelty), it would be difficult to appreciate the findings below and to understand the changing contours of the defence to the case for revocation without starting with a consideration of that claim.

It was contended consistently by Doric that the inventive step for claim 1 was the same as the inventive step for claim 13, namely adding integer (vi) to a known product. By the conclusion of the hearing, Lockwood contended that the s 7(3) information relevant to determining whether claim 13 involves an inventive step was more limited than the s 7(3) information relevant to determining whether claim 1 involves an inventive step. This inevitably carries with it the recognition that the inventive step for claim 13 is determined by reference to the combination of integers to be found in claim 13, which is a different combination of integers from that to be found in claim 1.

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Claim 1 encompasses a corporeal subject matter, namely a lock with the features of the Lockwood 001 with the added feature of a lock release means responsive to an outside actuator such as a key. It is explained in the specification that the Lockwood 001 gave rise to the patentee's development of the invention. As stated by this Court earlier¹¹⁴, the invention here does not claim a monopoly in any individual integer: it is a combination of integers including integer (vi). It is not permissible to treat integer (vi) in isolation, since inventiveness has to be

111 Maeder v Busch (1938) 59 CLR 684 at 706 per Dixon J.

112 (1959) 102 CLR 252.

113 (1959) 102 CLR 252 at 271 per Dixon CJ, Kitto and Windeyer JJ.

114 (2004) 217 CLR 274 at 304 [78].

determined by considering the combination as a whole¹¹⁵, just as the novelty of a combination has long been judged on the whole combination¹¹⁶.

- The particular point here was whether the combination in claim 1 was obvious because it was obvious to add integer (vi) (which was a known integer, but not common general knowledge), to integers (i)-(v) (which were part of common general knowledge). Integer (v) had a well-understood function of withdrawing the latch bolt before integer (vi) was added. After integer (vi) was added, integer (v) had two functions, both to withdraw the latch bolt and deactivate the inside handle lock, and the combination as a whole involved a synergy¹¹⁷ between integers (iv), (v) and (vi) which did not exist previously in locks, within common general knowledge.
 - Doric sought to characterise the claim as one where it was obvious to combine the integers¹¹⁸ and the key was an obvious mechanism to achieve an obvious advantage¹¹⁹.

- What was not in dispute is that the prior known product, the Lockwood 001, which contained integers (i)-(v), and which was discussed in the body of the specification, was part of the common general knowledge. Nor was it disputed that it was clear to anyone operating a Lockwood 001 that operation of the outside activator (the key) did not release the inside handle lock. The primary judge also noted that integer (vi) of claim 1 was to be found in certain storeroom locks, a Lockwood lock known as the Lockwood 530, a lock known as the Boyd mortice lock and in certain sliding door locks, but his Honour found these were not part of common general knowledge. Doric did not seek to disturb that finding on this appeal. Rather, Doric's response to that finding was to rely on s 7(3) of the Act, in order to characterise the individual sales of the storeroom locks as s 7(3) information relevant to the question of whether claim 1 involves an inventive step when compared with the prior art base.
 - **115** Alphapharm (2002) 212 CLR 411 at 419 [6]; Minnesota Mining (1980) 144 CLR 253 at 266.
 - 116 May v Higgins (1916) 21 CLR 119 at 121-122 per Griffith CJ.
 - 117 A notion referred to in *Lucas v Peterson Portable Sawing Systems Ltd* [2006] 3 NZLR 721.
 - 118 For a recent example, see Sabaf SpA v MFI Furniture Centres Ltd [2005] RPC 10.
 - 119 Adelmann and Ham Boiler Corporation v Llanrwst Foundry Company (1928) 45 RPC 413; Acme Bedstead Co Ltd v Newlands Brothers Ltd (1937) 58 CLR 689; Winner v Ammar Holdings Pty Ltd (1992) 24 IPR 137; Winner v Ammar Holdings Pty Ltd (1993) 41 FCR 205.

The proceedings before the primary judge

73 Before examining the decision of the primary judge in detail, it is necessary to say something about the evidence of the witnesses at trial and the way in which the arguments concerning inventive step proceeded below.

Witnesses

At trial, the evidence of four people was of greatest significance to the inventive step issue: Mr Wilson, a locksmith, and Mr Freestone, a lock designer, both experts called by Lockwood; Mr Garland, an expert called by Doric; and Mr Alchin, the inventor of the Doric lock. Mr Blanch, the inventor of the lock the subject of the Patent, was not called to give evidence at trial, but certain documents relating to his endeavours were in evidence. The body of evidence was admitted, substantially although not wholly without objection, and was relevant to prior art, common general knowledge, the problem to be solved and the advance in the art represented by the invention.

Mr Garland

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Mr Garland gave evidence that he had designed components for over 40 types of doors and locks for Doric and that he had been personally involved with both mortice locks and rim mounted locks. A rim mounted lock is a lock mounted to the surface of the door, as opposed to a lock which is installed or "morticed" into the centre of the door's edge. He was retained by Doric to design a product to compete with the Lockwood 001, and he understood it was a rim mounted deadlock. He was familiar with the known Lockwood 001 and observed "there is a problem of locking yourself in". Mr Garland was a person who prided himself on his inventive faculties, having been named as inventor or having been associated with various granted patents including patents for "lock type products". He purported to characterise the addition of integer (vi) to the Lockwood 001 as an "obvious solution"; but he did not come up with the solution in the Patent himself, in either claim 1 or claim 13, despite knowing of the storeroom locks and despite his interest as an inventor in research and development. Mr Garland agreed that if he had come up with the solution (despite not being briefed to do so by Doric) he would have passed the solution on to Doric. Mr Garland also gave evidence that there was more than a single solution to the problem of being "locked in".

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Finally, although Mr Garland gave evidence that a distinction between a mortice lock (a lock which was not rim mounted) and a rim mounted lock was only a question of the positioning of the locks, as well as evidence that he knew of the storeroom locks before the priority date of the Patent, he did not give evidence that he would have looked at storeroom locks if he had been asked to seek a solution to the problem of being locked in with the Lockwood 001. One of the recurring difficulties on the appeal was whether evidence such as that could embrace the

concept of claim 1 as well as more specific examples of solutions as contained in claim 7 or claim 13.

The primary judge rejected Mr Garland's evidence that a non-inventive skilled worker would have hit upon Lockwood's solution¹²⁰. First, Mr Garland was an inventor, and secondly, Mr Garland did not come up with the solution, despite being aware of the "locked in" problem¹²¹.

Mr Alchin

- Mr Alchin, the other relevant witness for Doric, was familiar with the known Lockwood 001, but gave evidence that he did not recognise that a problem with the product was its "lack of a safety release feature". He agreed "with the benefit of hindsight" that it was an advantage to add a "safety release feature" to the known Lockwood 001. He said that at the time of the release of the improved Lockwood products, produced in accordance with the Patent, he was not sure that the problem of "getting locked in" was a "big enough problem for this change [the addition of the safety release feature to the Lockwood 001] to have been an advantage" but he said: "I suspect in hindsight that it was".
 - The primary judge found that Mr Alchin, Doric's lock designer, "did not set out to copy that product [ie, the new Lockwood 001 with safety release feature] beyond taking the bare idea of the inclusion of a lock release means whereby the inside lock would be released by the operation of the outside actuator"¹²².

Mr Wilson

Mr Wilson was a locksmith rather than a lock designer. He had sold the Lockwood 001 product and gave evidence that when he was selling the product he always told purchasers "to ensure that when they come home that they unlock the inside as they come home so they don't find themselves in the house locked in". He regarded the Patent as directed to the problem of "people locking themselves in".

The primary judge emphasised that Mr Wilson had said in crossexamination that he had never been asked to design any lock, whether or not containing feature (vi) of claim 1¹²³.

Mr Freestone

120 (2001) 192 ALR 306 at 336 [169].

121 (2001) 192 ALR 306 at 335-336 [166].

122 (2001) 192 ALR 306 at 338 [179].

123 (2001) 192 ALR 306 at 334 [159].

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- Mr Freestone gave evidence that there was a problem posed by the dead latch of the Lockwood 001. He also gave evidence that the inventor's solution to the problem was "ingenious" but this was recognised, correctly, by the primary judge as evidence in respect of Lockwood's preferred embodiments rather than evidence of any inventive step involved in adding integer (vi) to integers (i)-(v) in the Lockwood 001.
- ⁸³ Putting to one side evidence of the ingenuity of the preferred embodiment, Mr Freestone, whose reference point was the Lockwood 001, gave evidence that the problem of "being locked in to residences" had been put in the "too hard basket". Because his reference point was a vendible product which involved some mechanics, this evidence must be taken to mean "too hard" from some practical or technical point of view. The primary judge accepted this evidence and found that Mr Freestone was a careful and reliable witness¹²⁴.

Arguments on common general knowledge before the primary judge

⁸⁴ Whilst it was recognised before the primary judge that each claim must be considered separately in order to determine whether it involved an inventive step, for the purposes of the argument Doric broke the claims down into two groups. The first group included claims 1-6, 12-15, 20, 21, and 30-32, which group was characterised as claims which include matters within common general knowledge in combination with integer (vi)¹²⁵. The second group included claims 7-11, 16-19, 22-29, and 33. This group was characterised as "preferred embodiment" claims which include matters within common general knowledge in combination with integer (vi) and additional integers¹²⁶.

In accordance with s 7(2) of the Act, the primary judge first considered whether the claims were obvious by reference to common general knowledge considered alone. In his discussion of that issue, his Honour correctly acknowledged that it was a question of fact¹²⁷, and observed that this was not a case in which the perception of the problem could be said to be inventive, because the problem was well-known. Any inventiveness, he said, would lie with the solution to the problem¹²⁸. The primary judge also acknowledged that it would be a question of fact whether the invention described in claim 1 was "merely a product

124 (2001) 192 ALR 306 at 336 [169].

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125 (2001) 192 ALR 306 at 340-341 [196]-[197].

126 (2001) 192 ALR 306 at 340 [196] and 343 [213].

127 (2001) 192 ALR 306 at 342 [208].

128 (2001) 192 ALR 306 at 341 [200].

described by reference to a set of 'obviously desirable' parameters"¹²⁹. This was a reference to the terms of a successful challenge, in respect of obviousness, in *Re Raychem Corp's Patents*¹³⁰.

The primary judge noted that the Lockwood 001 possessed integers (i)-(v) of claim 1 of the Patent and that the specification "admits that those features were part of the common general knowledge"¹³¹. However, in that context, the primary judge acknowledged that "[f]rom the perspective of the skilled worker, obviousness is or may be bound up with practical considerations"¹³². The primary judge stated¹³³:

"Guided by *Re Raychem Corp's Patents* and *Winner v Ammar Holdings* my initial impression was that the generality of the description of the invention in claim 1, and in particular feature (vi), was sufficient to lead to the conclusion that the alleged invention as claimed is obvious."

The primary judge then considered two matters: the evidence of admissions in the specification; and the evidence of the witnesses.

- His Honour found there were two admissions in the specification:
 - that key operation of the latch from the outside of the door did not release the inside handle lock; and
 - that, as a result, people may be locked in 134 .

In relation to the evidence of witnesses, the primary judge said¹³⁵:

"No witness deposes to the fact that it was understood at the priority date that a solution to the problem identified in the specification was to use

- **129** (2001) 192 ALR 306 at 342 [208].
- 130 [1998] RPC 31.
- **131** (2001) 192 ALR 306 at 339 [186].
- **132** (2001) 192 ALR 306 at 343 [208]. The reference to "practical considerations" calls to mind the "Cripps question" set out in *Sharp & Dohme Inc v Boots Pure Drug Company Ltd* (1928) 45 RPC 153 at 173.
- **133** (2001) 192 ALR 306 at 342 [207].
- 134 (2001) 192 ALR 306 at 341 [202].
- 135 (2001) 192 ALR 306 at 343 [211].

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the outside key to release the inside lock. It was not obvious to Mr Freestone or Mr Wilson. The fact that resolution of the problem was placed in the 'too hard' basket by Mr Freestone is inconsistent with obviousness. The evidence of Mr Wilson and Mr Freestone establishes that there was a perceived need to find a solution to the problem, but it had not occurred to Mr Alchin or Mr Garland until after the release of the new Lockwood 001 that the problem should be solved in a manner which, in Doric's submission, was obvious."

His Honour then proceeded to find that claim 1 was not obvious by reference to common general knowledge alone.

- 89 The primary judge then referred to ss 7(2) and 7(3) of the Act, and considered the evidence of the other types of locks referred to by Doric, but did not find that any of the locks could, before the priority date, reasonably be expected to have been ascertained, understood and regarded as relevant¹³⁶ by a person skilled in the art. Further consideration of this aspect of his Honour's reasons will be necessary later.
- ⁹⁰ The primary judge appreciated the difference between a general claim, like claim 1, which Doric argued was obvious, and preferred embodiment claims, which Doric accepted in this Court were not obvious, although it had previously argued to the contrary before Hely J¹³⁷.
- 91 Having completed the task mandated by s 7(2), the primary judge concluded that Doric had failed to prove that claim 1 did not involve an inventive step. As claim 1 had been treated as representative of all dependent claims, no separate findings were made by his Honour in respect of claim 13.

The decision of the Full Court

92 The Full Court's analysis of obviousness commenced with a discussion of the identification of "the problem"¹³⁸:

"Doric identified the problem the invention was concerned to solve as the fact that, after an occupant had entered premises by unlocking the door from the outside and then closing it, the internal handle or knob remained locked until the key was used to unlock it from the inside. On the other hand Lockwood identified the problem as the fact that after the occupant had secured entry and closed the door, the occupant was locked

136 (2001) 192 ALR 306 at 344-346 [217]-[225].

137 (2001) 192 ALR 306 at 344 [214].

138 (2005) 226 ALR 70 at 96 [116].

inside, which arose from a number of factors, not just the fact that the internal handle remained locked after the door had been opened with the outside key."

There is little distinction between these accounts of the perceived problem and they both echo the statement of the problem by this Court in its decision on fair basis, as set out above¹³⁹.

The Full Court then set out part of the specification which described the background to the Patent, whereby the lock was¹⁴⁰:

"typically arranged so as to be operated from the inside of the door and ... not operable from the outside of the door. In particular, key operation of the latch from the outside of the door will not release the lock. That can lead to serious problems in circumstances where the door needs to be opened urgently from the inside".

The Full Court labelled the fact that the key operation of the latch from the outside of the door would not deactivate the inside handle lock as a "deficiency" of conventional assemblies and said¹⁴¹:

"[T]he deficiency the invention was designed to overcome was that inherent in the conventional assembly, namely that the key operation of the latch from the outside of the door did not release the inside lock. It is true that the specification refers to 'serious problems' arising from the configuration of the conventional assembly, but that is a mere consequence of a deficiency in the assembly. In the context of construing a patent specification, the invention was not to solve the consequential problem, but to overcome an inadequacy in the existing art by remedying the deficiency in the assembly. Of course, if that deficiency were cured, the consequential problem would evaporate. But it was the initial deficiency to which the invention was directed."

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The "proper question" was then described by the Full Court as follows¹⁴²:

"The importance of thus identifying the problem sought to be solved by the invention, and the inventive step employed to do so, is that it enables the 'obviousness' question to be properly propounded: would it be obvious

141 (2005) 226 ALR 70 at 96 [118].

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¹³⁹ At [10].

¹⁴⁰ (2005) 226 ALR 70 at 96 [117].

^{142 (2005) 226} ALR 70 at 99 [130] (emphasis in original).

to an ordinary skilled but not inventive worker that the problem created by integer (iv) could be resolved by making the inside handle operable from outside the door? The question is not whether the hypothetical worker would have known *how* to achieve that result."

Having laid that groundwork, the Full Court accepted a submission from Doric that there was no inventive step in conceiving of a remedy for the "deficiency" in known locks by any means using an outside actuator¹⁴³. The Full Court expressed the essence of its reasoning as follows¹⁴⁴:

"Doric does not claim that the specification expressly admits that claim 1 (and thus claim 13 and the other live claims dependent on that claim) is obvious. Rather, it says that the specification admits that it was common general knowledge that, in the typical lock, the outside key did not release the inside lock."

It seems that the Full Court's acceptance of Doric's submission based on *Winner v Ammar Holdings Pty Ltd* ("*Winner*")¹⁴⁵ follows from a finding which it made that the specification contained the "implicit 'corollary' admission" that a solution to the deficiency, namely to use the outside key to deactivate the inside handle lock, was common general knowledge as at the priority date¹⁴⁶. The circularity of such reasoning is immediately apparent, and makes it necessary to consider admissions in the specification in more detail later. The Full Court also reversed the primary judge's finding that s 7(3) did not assist Doric and found that the storeroom locks upon which Doric relied constituted s 7(3) information under the second limb of s 7(3)(a), that is, through a single act. In the result, the Full Court overruled the primary judge and found that claim 1 did not involve an inventive step. The Full Court did not distinguish claim 13 from claim 1 in coming to this conclusion, which reflected the way in which argument had proceeded before it.

The Full Court's treatment of the witnesses

The Full Court said it was unnecessary to refer to Mr Garland's evidence because what he had said about "the solution" was contrary to the fact that it was understood at the priority date that the solution was to use the outside key to release the inside lock. The Full Court approached the evidence of Mr Alchin in the same

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¹⁴³ (2005) 226 ALR 70 at 100-101 [137].

^{144 (2005) 226} ALR 70 at 100 [137].

^{145 (1992) 24} IPR 137.

^{146 (2005) 226} ALR 70 at 101 [138]-[140], 105 [156], 106 [159].

way¹⁴⁷. Whilst the Full Court does not appear to have reversed the findings of the primary judge concerning Mr Garland and Mr Alchin, the Full Court stated¹⁴⁸:

"[N]othing that Mr Alchin or Mr Garland said about 'the solution' was to the contrary of the fact that it was understood at the priority date that a solution to the problem was to use the outside key to release the inside lock."

That conclusion of the Full Court was premised on its "implicit 'corollary' admission" finding, explained above.

- 99 After noting that Mr Wilson's evidence on the solution to the problem related to Lockwood's preferred embodiment, the Full Court concluded that it was not possible to derive from Mr Wilson's evidence "that it was not obvious to him that the problem could be solved by using the outside key to release the inside lock"¹⁴⁹.
- 100 With respect to the evidence of Mr Freestone, the Full Court found that what was in the "too hard" basket he had referred to was "the nitty gritty" of solving the problem, that is, something more than the idea of adding integer (vi) to integers (i)-(v) to be found in the Lockwood 001. But Mr Freestone had not been challenged with a view to establishing that proposition.

Doric's submissions on common general knowledge in this Court

- 101 Doric had not called witnesses to give direct evidence of the lack of inventive step at trial. In the absence of such evidence, Doric relied on the two admissions in the specification: that first, the outside key did not deactivate the inside handle lock; and that secondly, as a result, people may be locked in¹⁵⁰.
- In seeking to uphold the Full Court's conclusions in this Court, Doric contended that merely conceiving of the reverse of the first admission could not "involve an inventive step" as required by s 18(1)(b)(ii) of the Act. Doric accepted that the Full Court's reference to the "implicit 'corollary' admission" in the specification must be a reference to the solution to the problem being a corollary of the admission that the problem was common knowledge. Whilst Doric did not seek to uphold that aspect of the Full Court's reasoning, Doric submitted that although the specification did no more than admit that the patentee's locks existing before the priority date did not have integer (vi), the Court is entitled, as "a matter

147 (2005) 226 ALR 70 at 105 [155]-156].

- **148** (2005) 226 ALR 70 at 105 [156].
- **149** (2005) 226 ALR 70 at 102 [144].
- **150** (2001) 192 ALR 306 at 341 [202].

of judgment", to find that it is obvious to add integer (vi) to known locks, that is, to use the outside key to deactivate the inside handle lock. It was argued that the addition of integer (vi) to overcome the known disadvantage, that the key used outside on the Lockwood 001 did not deactivate the inside handle lock, did not involve an inventive step.

103 The next step in Doric's argument was the contention that the primary judge made two errors in assessing the evidence of the witnesses. First, it was contended that he failed to distinguish between evidence directed to the concept or idea of a combination of integers (i)-(v) to which integer (vi) was added, and discrete evidence directed to the mechanical details of implementing that concept. Secondly, it was contended that the primary judge gave too much weight to secondary evidence, such as copying by Doric. It was correctly conceded by Doric that in forming a judgment as to whether an invention lacks an inventive step, it is necessary for a judge to consider and weigh all the relevant evidence when determining whether the addition of an integer to a known combination of other integers involves an inventive step. This is particularly the case where the added integer can be characterised as a "simple mechanical expedient", as it was in argument here.

Lockwood's submissions on common general knowledge in this Court

104 Lockwood relied on the primary judge's analysis of the problem as the problem of being "locked in", said to be grounded in the evidence. It was contended that there was no admission, express or implied, in the specification that non-inventive persons skilled in the art knew, before the priority date, that the solution to the problem of being "locked in" was to make the outside key perform what was for it a second function, namely deactivating the inside handle lock. Lockwood further submitted that there was evidence before the primary judge directed to the concept or idea of adding integer (vi) to the Lockwood 001. Most relevantly, the solution said by the Full Court to be part of common general knowledge, and therefore obvious, was not possessed at the priority date by the industry witnesses called by Doric. Lockwood also relied on Doric's copying of the "bare idea" of claim 1 as evidencing the inventive step.

Admissions in a specification

Admissions may be made in a specification, particularly about prior art and common general knowledge. This is consistent with conventional methods of drafting patent specifications intended and recognised as a way of clearly articulating the advance over prior art made by the invention. Such an approach also facilitates an understanding of the relevant inventive step, irrespective of whether the inventive step is identified with any precision in the specification, a task which may be difficult¹⁵¹. While not every invention constitutes a solution to a problem, it is commonplace so to describe an invention where it is appropriate to do so¹⁵². Admissions in a specification about any problem said to be overcome by an invention are made from the vantage point of knowing the solution. When used as evidence, they would always need to be weighed with evidence, if it exists, from persons skilled in the relevant art of their perception of any problem at the time before the priority date, before their exposure to any solution contained in the invention.

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In Chapman and Cook and Lectro Linx Ltd v Deltavis Ltd¹⁵³ ("Chapman"), Clauson J remarked¹⁵⁴:

"[I]f a Patentee, though entirely erroneously, does state by way of what I may call recital in his Specification that a particular form of thing is common and then by some oversight or some mistake claims a monopoly in that particular form of thing he will have, so to speak, recited himself out of Court and I venture to doubt whether he could possibly maintain any claim to a monopoly in a thing which he has recognised to be something which existed."

Chapman may be understood as a case which exemplifies a specification showing "on its face" that an invention did not involve an inventive step. The expression derives from *Commissioner of Patents v Microcell Ltd*¹⁵⁵ ("*Microcell*"), which stands for a narrow proposition that a Commissioner of Patents, or his or her delegate, may refuse an application for patent protection where a specification "on its face" shows the invention claimed is not a manner of new manufacture. This may arise, for example, from admissions concerning novelty. The decision in *Microcell* has not always been properly understood; it does not involve a separate ground of invalidity or a discrete "threshold" test¹⁵⁶.

- **151** British United Shoe Machinery Company Ltd v A Fussell & Sons Ltd (1908) 25 RPC 631 at 650.
- 152 Patent examiners are encouraged to use the "problem/solution" approach: IP Australia, *Australian Patent Office Manual of Practice and Procedures*, (2006) at [2.5.1.6], "Assessing Inventive Step in Examination", http://www.ipaustralia.gov. au/pdfs/patentsmanual/WebHelp/Patent_Examiners_Manual.htm>.
- **153** (1930) 47 RPC 163.
- **154** (1930) 47 RPC 163 at 173.
- 155 (1959) 102 CLR 232; referred to in the *NRDC* case (1959) 102 CLR 252.
- **156** N V Philips Gloeilampenfabrieken v Mirabella International Pty Ltd (1995) 183 CLR 655 at 664.

- 107 It is also possible to imagine, as Lord Hoffmann did in *Biogen Inc v Medeva* plc^{157} that there may be cases where the alleged subject matter is "so obviously not an invention that it is tempting to take an axe to the problem by dismissing the claim"¹⁵⁸. Such cases are likely to be rare.
- 108 Although it is not usual for an express admission to be made in a specification that a crucial integer in a combination patent is common general knowledge¹⁵⁹, when such an admission is made, a court is entitled to treat the admission as part of the evidence to be considered on the issue of obviousness¹⁶⁰. An admission in a specification that some integers of a combination are common general knowledge can be considered together with witnesses' evidence as to whether the remaining integers are also common general knowledge¹⁶¹. However, admissions of mixed fact and law will not necessarily be conclusive¹⁶² on the issue of common general knowledge¹⁶³. Nor will they oust the trial judge's function of weighing *all* the evidence.
- 109 In Sonotone Corporation v Multitone Electric Coy Ltd ("Sonotone")¹⁶⁴, which concerned an invention that applied a known scientific principle to the construction of a hearing aid, the English Court of Appeal noted that express
 - 157 [1997] RPC 1.
 - **158** [1997] RPC 1 at 42. See also *Genentech Inc's Patent* [1989] RPC 147 at 264 per Mustill LJ.
 - **159** Allmanna Svenska Elektriska A/B v The Burntisland Shipbuilding Co Ltd (1951) 69 RPC 63.
 - 160 Allmanna Svenska Elektriska A/B v The Burntisland Shipbuilding Co Ltd (1951) 69
 RPC 63 at 72 per Jenkins LJ, delivering the judgment of the Court. See also Longbottom v Shaw (1891) 8 RPC 333 and Taylor and Scott v Annand and the Northern Press and Engineering Company Ltd (1900) 18 RPC 53.
 - 161 Washex Machinery Corporation v Roy Burton & Co Pty Ltd (1974) 49 ALJR 12.
 - 162 Dovuro Pty Ltd v Wilkins (2003) 215 CLR 317 at 331 [40] per McHugh J, 340-342 [68]-[71] per Gummow J, 372 [177] per Heydon J. See also, with respect to admissions as to copyright ownership made by an alleged infringer, the discussion by Burchett J in Commonwealth v Oceantalk Australia Pty Ltd (1998) 79 FCR 520 at 523-524.
 - **163** Blanco White, *Patents for Inventions and the Protection of Industrial Designs*, 5th ed (1983) at 87.
 - **164** (1955) 72 RPC 131.

admissions in a specification about matters of common general knowledge must carry great weight but that such admissions do not estop a patentee from leading evidence in order to resile from them¹⁶⁵. Blanco White's comment on *Sonotone*¹⁶⁶ "that something nobody has ever suggested can in any sense form part of existing knowledge seems almost a contradiction in terms"¹⁶⁷ is particularly apposite to the notion that a solution to a problem is an "implicit 'corollary' admission" in a specification which states the problem. Admissions in a specification on common general knowledge are, without doubt, relevant but they are to be assessed as to their probative force like all other evidence.

- The specification in the Patent does not contain any express admission that 110 integer (vi) was common general knowledge¹⁶⁸. Nor does it contain any express admission that it was obvious to add integer (vi) to integers (i)-(v). The specification admits being "locked in" was a known problem. The specification admits it was known that the key used to unlock the door from outside in the product containing integers (i)-(v) did not deactivate the independent inside handle lock. There is no doubt the specification is explaining the development of an improved lock by reference to previously known locks. It is possible to take the admissions in the specification set out above, together with other evidence from witnesses, to find that it was a subset problem of the problem of being "locked in" that the Lockwood 001 lacked a safety release mechanism for the inside handle lock when the key to deactivate the inside handle lock was missing. For example, Mr Wilson, a locksmith called by Lockwood, said he "had been aware for many years of the problem of people locking themselves in their houses because the key to unlock the inside handle was not accessible"¹⁶⁹. However, that is not an implication arising from the specification. That approach involves doing no more than considering the express admissions in the specification together with other evidence¹⁷⁰.
 - 165 (1955) 72 RPC 131 at 139-140, followed in Gerber Garment Technology Inc v Lectra Systems Ltd [1995] FSR 492. See also Hoad v Swan (1920) 28 CLR 258 at 264 per Isaacs J, delivering judgment on behalf of the Court, which included Knox CJ and Rich J.
 - 166 (1955) 72 RPC 131.
 - **167** Blanco White, *Patents for Inventions and the Protection of Industrial Designs*, 5th ed (1983) at 87.
 - 168 cf Chapman (1930) 47 RPC 163.
 - **169** (2001) 192 ALR 306 at 311 [12].
 - 170 As occurred in Washex Machinery Corporation v Roy Burton & Co Pty Ltd (1974) 49 ALJR 12.

- The Full Court implied that it was obvious to conceive the reverse of a 111 statement in the specification which noted the absence of a feature in a prior art product. But the question of whether the concept of adding integer (vi) to integers (i)-(v) (claim 1) or to the combination of integers (i)-(v), and (vii)-(x) (claim 13) is inventive will turn on what a person skilled in the relevant art, possessed with that person's knowledge, would have regarded, at the time, as technically possible in terms of mechanics, and also as practical. That is the sense in which an idea can involve an inventive insight about a known product. A court cannot substitute its own deduction or proposition¹⁷¹ for that objective touchstone, except in the rarest of circumstances, such as where an expressly admitted matter of common general knowledge is the precise matter in respect of which a monopoly is claimed¹⁷². Even if an idea of combining integers, which individually may be considered mere design choices, is simple, its simplicity does not necessarily make it obvious. Older cases concerning simple mechanical combinations illustrate this point¹⁷³, as does Haberman v Jackel International Ltd¹⁷⁴. Common general knowledge has negative as well as positive aspects¹⁷⁵. Practical and technical issues¹⁷⁶ can affect the means by which a concept may be implemented in respect of an already known vendible product, and scepticism can inhibit recognition of the utility of applying a concept or idea to a known set of integers. These are matters within the knowledge of relevant witnesses. Further, the Full Court's approach contravened the long-established principle that a specification is to be construed in the light of common general knowledge¹⁷⁷.
 - 171 Technograph Printed Circuits Ltd v Mills & Rockley (Electronics) Ltd [1972] RPC 346 at 355 per Lord Reid, affirmed by Pumfrey J in Glaxo Group Ltd's Patent [2004] RPC 43.
 - 172 Chapman (1930) 47 RPC 163.
 - 173 See, for example, *Taylor and Scott v Annand and the Northern Press and Engineering Company Ltd* (1900) 18 RPC 53 at 63 per Lord Halsbury LC; *Vickers, Sons & Co v Siddell* (1890) 15 App Cas 496.
 - 174 [1999] FSR 683 at 697-698 [29] and 706 [45] per Laddie J.
 - 175 *Dyson Appliances Ltd v Hoover Ltd* [2001] RPC 26 at 490 [39], 491 [44] per Fish QC (sitting as a Deputy Judge of the High Court).
 - 176 Hallen Co v Brabantia (UK) Ltd [1989] RPC 307 at 327 per Aldous J. See also Dyson Appliances Ltd v Hoover Ltd [2002] RPC 22 at 493 [87]-[88] per Sedley LJ; Molnlycke AB v Procter & Gamble Ltd (No 5) [1994] RPC 49.
 - 177 Welch Perrin & Co Pty Ltd v Worrel (1961) 106 CLR 588 at 610; Kimberly-Clark Australia Pty Ltd v Arico Trading International Pty Ltd (2001) 207 CLR 1 at 16 [24].

The evidence of witnesses

- In regard to Doric's submission and the Full Court's finding that the primary 112 judge erred in failing to distinguish between evidence concerning the concept in claim 1 and evidence concerning preferred embodiments, it must be recognised that there were some unresolved obscurities and ambiguities in the evidence. These were occasioned to some extent by the way in which the trial was conducted. The primary judge did not exclude from his consideration of whether claim 1 involved an inventive step every single piece of evidence concerning preferred embodiments. Nor did he isolate or quarantine in some way every piece of evidence concerning the concept or idea of adding integer (vi) to integers (i)-(v) to be found in the Lockwood 001. Such an exercise would have been near impossible because the reference point in the prior art of greatest significance was the Lockwood 001, a known product with known mechanics. It would also have been impossible because, at trial, it was contended by Doric that the concept of adding integer (vi) (claim 1), that is any means to deactivate the inside handle lock from the outside, and the preferred embodiments, were all obvious. That approach permeated the evidence, including the oral evidence.
- 113 To that extent, debates on this appeal about whether references in the evidence were or were not exclusively references to the idea of adding integer (vi) to integers (i)-(v) to be found in the Lockwood 001 were, occasionally, extremely cerebral. A good example was a debate over the meaning of the phrase "auto-unlocking". There was evidence that the phrase referred to a mechanism whereby the inside handle lock on the Lockwood 001 was released by a door slamming. It is clear the primary judge understood the phrase more generally to mean a safety release mechanism other than a key. Doric contended the phrase described the invention. Whether the phrase meant different things, depending on differing contexts, is a debate which the parties could not expect to have resolved in this Court.
- In any event, the main issue for this Court is whether the combination of integers in claim 13 involves an inventive step. This requires the consideration of the combination itself and any other evidence to determine whether the evidence, as a whole, supports the inventiveness of the combination.

Secondary evidence

115 Something further also needs to be said about secondary evidence. Secondary evidence, such as commercial success, satisfying a long-felt want or need, the failure of others to find a solution to the problem at hand and copying by others such as competitors, has a role to play in a case concerning an inventive step. In *Molnlycke AB v Procter & Gamble Ltd (No 5)*¹⁷⁸ ("*Procter & Gamble*"),

178 [1994] RPC 49. Nicholls VC delivered the judgment of the Court.

Nicholls VC warned that secondary evidence should not be permitted to "obscure the fact that it is no more than an aid in assessing the primary evidence"¹⁷⁹. That observation can be compared with the treatment of secondary evidence in the United States of America. Under § 103 of the *Patents Act* 1952 (US) it is necessary to make a number of factual inquiries when making a determination of invalidity based on obviousness. The primary considerations include determining the scope and content of prior art, identifying the differences between the prior art and the advance over the prior art which is claimed and assessing the level of ordinary skill in the art. Secondary considerations of non-obviousness, if any, are also to be determined. In *Graham v John Deere Company of Kansas City* ("*Graham*")¹⁸⁰ the Supreme Court of the United States identified the role of secondary evidence¹⁸¹:

"Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc, might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquiries may have relevancy."

Since *Graham*, the inquiry into secondary considerations of non-obviousness has been treated as being an important inquiry which must be taken into account because prior art cannot be evaluated in isolation¹⁸².

- 116 An Australian court should be slow to ignore secondary evidence or to rely on its own assumed technical expertise to reach conclusions contrary to such evidence¹⁸³. Australian courts have long recognised that the importance of such evidence and its weight will vary from case to case; it will not necessarily be determinative¹⁸⁴.
 - 179 [1994] RPC 49 at 113. See also *Hoechst Celanese v BP Chemicals* [1997] FSR 547 at 563, and Bently and Sherman, *Intellectual Property Law*, 2nd ed (2004) at 484-485.

180 383 US 1 (1966).

- **181** 383 US 1 at 17-18 (1966).
- **182** De Witt, "Use of Objective Evidence of Non-Obviousness in the Federal Courts", (1997) 79 Journal of the Patent and Trademark Office Society 823 at 825-826.
- 183 Firebelt Pty Ltd v Brambles Australia Ltd (2002) 76 ALJR 816; 188 ALR 280; Bristol-Myers Squibb Co v FH Faulding & Co Ltd (2000) 97 FCR 524.
- 184 Firebelt Pty Ltd v Brambles Australia Ltd (2002) 76 ALJR 816 at 825-826 [47]-[50];
 188 ALR 280 at 292-293. See also Commonwealth Industrial Gases Ltd v MWA Holdings Pty Ltd (1970) 180 CLR 160; Olin Corporation v Super Cartridge Co Pty Ltd (1977) 180 CLR 236 at 262 per Stephen and Mason JJ. And see also Procter &

- 117 Doric contended that secondary evidence should have been given little or no weight in this case and contrasted the facts here with those in *Intalite International NV v Cellular Ceilings Ltd (No 2)*¹⁸⁵ by relying on the storeroom locks as solving the problem of being "locked in". However, Doric did not challenge here the primary judge's finding that such locks were not part of common general knowledge.
- 118 Lockwood urged that such evidence should be taken into account like any other piece of relevant evidence. Doric's submission should be rejected because a combination patent cannot be assessed fairly as to its inventive step without considering and weighing properly such secondary evidence. It was of particular relevance to the primary judge that no non-inventive persons skilled in the art who were called as witnesses came up with the combination of claim 1 before the priority date, and that Doric (per Mr Alchin) copied the "bare idea" of Lockwood's improved lock. There was no error shown in the primary judge's reliance on secondary evidence and he was entitled to give it such weight as was appropriate in all the circumstances of the case.
- In summary, despite some obscurities as analysed by the primary judge, the evidence showed a felt want, the failure of others (including the inventive Mr Garland) to come up with the same solution as Lockwood, and the copying of Lockwood's "bare idea" by Doric. When skilled, non-inventive persons, and in this case also a skilled inventive person (Mr Garland), looking for improvements, fail to arrive at the invention, it is impossible to suggest that it would have been obvious to the skilled and not necessarily inventive person¹⁸⁶. The evidence supports the primary judge's findings.

Conclusions regarding the decisions below

- 120 The Full Court's approach to the evidence was coloured by the erroneous implication of the "corollary admission" which has already been discussed and it is not necessary to multiply illustrations of this error.
- 121 The primary judge was right to conclude that Doric had not succeeded in establishing that claim 1 lacked an inventive step by reference to common general knowledge. The inferential conclusion, that claim 13 did not lack an inventive step by reference to common general knowledge, was tied to his conclusion in respect of claim 1.

Gamble [1994] RPC 49 at 113 per Nicholls VC, delivering the judgment of the Court.

185 [1987] RPC 537.

186 Intalite International NV v Cellular Ceilings Ltd (No 2) [1987] RPC 537 at 547 per Whitford J.

Sections 7(2) and 7(3) of the Act

- Section 7(2) contemplates that the standard by which obviousness is to be judged, namely a person skilled in the relevant art, would possess common general knowledge and have regard to any s 7(3) information.
- 123 As touched upon already, lack of subject matter, the precursor to an objection based on obviousness, involved the need to determine the sufficiency of invention to sustain a patent. In 1894, Lord Esher MR made an observation¹⁸⁷, echoed in Doric's submissions:

"[W]hen you consider it, you come to the conclusion that it is so easy, so palpable, ... that any fool could do it."

- 124 There was no patentable subject matter when any person conversant with the art could achieve the result without any difficulty¹⁸⁸. Similar language has been used in respect of combination claims for a very long time. To be patentable, a combination needed to be new, useful and to show a *sufficient* amount of invention¹⁸⁹. Without a sufficient amount of invention, a combination was obvious. Despite the fact that the test for obviousness became qualitative rather than quantitative, once a statutory test was introduced, combinations which involve adding a single integer not within common general knowledge, to other integers within common general knowledge, may appear "easy", "palpable" or "simple". However, evidence from persons skilled in the art may confound such appearances.
- 125 It has already been noted that what is obvious under the *Patents Act* 1977 (UK) is different from what was so considered under preceding legislation in the United Kingdom. The current approach has been considered by the Court of Appeal in *Procter & Gamble*¹⁹⁰ in which Nicholls VC said¹⁹¹:

"Under the statutory code ... the criterion for deciding whether or not the claimed invention involves an inventive step is wholly objective. It

- **187** The Edison Bell Phonograph Corporation Limited v Smith (1894) 11 RPC 389 at 398.
- **188** Sudbury v Lee (1894) 11 RPC 58 at 60 per Romer J. See also Vickers, Sons & Co v Siddell (1890) 15 App Cas 496 at 501-502 per Lord Herschell.
- **189** Crane v Price (1842) 4 Man & G 580 at 605 [134 ER 239 at 249] per Tindal CJ delivering the judgment of the Court.

190 [1994] RPC 49.

191 [1994] RPC 49 at 112, delivering the judgment of the Court.

is an objective criterion defined in statutory terms, that is to say whether the step was obvious to a person skilled in the art having regard to any matter which forms part of the state of the art as defined in section 2(2)."

- What is obvious under Australian law is to be determined by the combined operation of ss 7(2), 7(3), 18(1)(b)(ii) and Sched 1 to the Act. These provisions are all directed to determining whether an invention "is to be taken to involve an inventive step when compared with the prior art base" (s 7(2)). Schedule 1 defines "prior art base" and s 7(3) contains the statutory test for enlarging the prior art base beyond common general knowledge.
- As stated above, by enlarging the prior art base through including relevant prior disclosures beyond those disclosures proven to be part of the common general knowledge, these provisions raise the threshold for inventiveness. However, the idea remains that the prior disclosures to be taken into account, even as enlarged by s 7(3), are being considered for a particular purpose. That purpose is the purpose of looking forward from the prior art base to see what a person skilled in the relevant art is likely to have done when faced with a similar problem which the patentee claims to have solved with the invention.
- Having found that claim 1 (and inferentially claim 13) was not obvious by reference to common general knowledge, the primary judge turned to consider whether there was information which would qualify as s 7(3) information which would need to be combined with common general knowledge to determine obviousness or lack of inventive step. Before the primary judge, Doric relied on information made public before the priority date by the acts of sales, taken individually, of:
 - storeroom locks;
 - the Abloy rim lock;
 - the sliding door locks;
 - the Boyd mortice lock; and
 - the Lockwood 530.
 - By the time of this appeal Doric only relied on the storeroom locks as being the locks which the Full Court considered under s 7(3). In fact, the Full Court only made findings about the storeroom locks, which it said rendered it unnecessary to consider whether the sale of the Lockwood 530 was information falling within s $7(3)^{192}$. In fact, the Lockwood 530 only differed from the storeroom locks by having a snib mechanism.

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¹⁹² (2005) 226 ALR 70 at 110 [180].

The "prior art base"

The primary judge

- 130 There was no doubt that each of the storeroom locks had been the subject of an act of sale and the primary judge had found that each contained integer (vi).
- 131 The primary judge also found that, having regard to the large range of locks on the market and the costs of acquiring them and taking them apart, he was not satisfied that a skilled addressee, before the priority date, would reasonably be expected to have "ascertained" the storeroom locks. The primary judge also relied on Mr Freestone's evidence that, in comparing lock designs, he would only take into account the rim mounted locks¹⁹³ as the basis of a finding that storeroom locks and the Lockwood 530 could not reasonably be "regarded as relevant" to the skilled addressee.

The Full Court

- 132 The Full Court overruled the decision of the primary judge on these two points. First, the Full Court held, correctly, that "ascertained" simply means discovered or found out. Therefore, locks do not need to be purchased and taken apart to be "ascertained" within the meaning of s 7(3). It also held, again correctly, that "understood" means that, having discovered the information, the skilled addressee would have "comprehended it" or "appreciated its meaning or import"¹⁹⁴.
- 133 Next, the Full Court held that the primary judge had failed to differentiate between the general claim 1 and the preferred embodiment claims. The Full Court said¹⁹⁵:

"Claim 1, and thus claim 13 and the other dependent claims, is not limited to rim mounted locks or even to locks for doors."

134 Then, by reference to the combination of integers in claim 1, the Full Court held that the storeroom locks, which are not rim mounted locks, and which disclose the integers of claims 1-6, would reasonably have been "regarded as relevant" by a skilled addressee¹⁹⁶. This led the Full Court to find that the primary judge should

193 (2001) 192 ALR 306 at 345 [221]-[222].

194 (2005) 226 ALR 70 at 110 [179].

195 (2005) 226 ALR 70 at 107 [168].

196 (2005) 226 ALR 70 at 110 [179].

have treated the storeroom locks as s 7(3) information, with the result that "the alleged invention in claim 1 would have been considered obvious"¹⁹⁷. The Full Court did not proceed to make any detailed finding on the question of whether claim 1 lacked an inventive step having regard to common general knowledge combined with any s 7(3) information¹⁹⁸. The Full Court made no express findings in respect of the combination of integers in claim 13 and dependent claims.

Doric's initial submissions on s 7(3)

- 135 Doric relied on the words in s 7(3) as referring to a lesser test than the test set out in *Minnesota Mining*¹⁹⁹ and *Alphapharm*²⁰⁰. To the extent that "lesser" was intended to mean a test which would make it harder for the invention to be shown to involve an inventive step over the prior art base, this submission is correct.
- Doric contended that each of the persons skilled in the relevant art knew of one or other of the storeroom locks and that therefore it could not be suggested that those locks, as pieces of prior art information, were not "ascertained" and "understood" by those persons, and that the primary judge erred in construing "ascertained" as requiring that those locks be disassembled in order to determine whether they were relevant to the broad claim, claim 1. That submission should also be accepted.
- 137 The next step in Doric's argument was that, given that claim 1 covered both rim mounted locks and non rim mounted locks, the primary judge erred in finding that only rim mounted locks would reasonably be relevant to the person skilled in the relevant art when approaching the problem known to exist with the Lockwood 001.

Lockwood's initial submissions on s 7(3)

Lockwood relied on evidence from Mr Garland, Mr Alchin and evidence associated with Mr Blanch to the effect that none of them referred to storeroom locks as relevant to solving the problem of being "locked in" with the Lockwood 001, a rim mounted lock or any equivalent product. It became clear during the hearing of the appeal to this Court that Lockwood's submissions on s 7(3), which were directed to upholding the findings of the primary judge, depended largely on the contention that the factual environment in which the obviousness of claim 13 was to be considered was that of rim mounted locks.

^{197 (2005) 226} ALR 70 at 110 [180]-[181], see also 105 [156] and 106 [159].

¹⁹⁸ (2005) 226 ALR 70 at 110 [180]-[181].

¹⁹⁹ (1980) 144 CLR 253.

²⁰⁰ (2002) 212 CLR 411.

- In those circumstances, the parties were given an opportunity further to address this Court on the question of whether a court can distinguish between a broad and narrow claim with the result that the information "regarded as relevant", under s 7(3), would not necessarily be identical for both claims. As already mentioned, both Lockwood and Doric agreed correctly that a court could distinguish between a broad and narrow claim for the purposes of determining what might be "regarded as relevant" for s 7(3) purposes.
- Before turning to the "prior art base" as determined by applying s 7(3), it is necessary to say something more about the subject matter of the Lockwood 001, claim 1, claim 13 and the storeroom locks, bearing in mind the distinction between a rim mounted lock, and one which is not.

The Lockwood 001

141 This lock was a rim mounted lock. It contained detent means which moved radially in respect of the axis of a cam. The lock achieved outside security against entry, after an occupant entered, but was subject to the "locked in" problem already explained.

Claim 1

142 Claim 1, containing integer (vi), covered locks which were not rim mounted and rim mounted locks, and also locks with detent means which moved axially or radially.

Claim 13

143 Claim 13, also containing integer (vi), was narrower than claim 1. The novelty of claim 13, over the storeroom locks, reposed in its extra integers (ix) and (x) of a cam and "detent means" which "includes at least one detent which moves substantially radially of [the] said cam axis".

The storeroom locks

- 144 The storeroom locks were not rim mounted locks. They contained detent means which moved axially. They contained integer (vi); however, the storeroom locks did not give outside security against entry without deliberate locking. Storeroom locks fall within claim 1 but do not fall within claim 13. Lockwood's supplementary submissions in respect of s 7(3)
- By reference to the need to consider each claim separately mandated by the opening words of s 18(1), Lockwood emphasised that the information to be regarded as relevant to claim 13 was information in the field of rim mounted locks, that being the field which a person skilled in the relevant art needed to consider when addressing the "locked in" problem posed by the rim mounted Lockwood 001. It was submitted that s 7(3) ought not be construed to admit

information that is relevant generally to the lock industry, regardless of the particular field of the invention. Alternatively, if "the relevant art" for s 7(3) purposes were to be construed more broadly than that, Lockwood submitted that the evidence discussed above showed that the storeroom locks would nevertheless not have been "regarded as relevant to work in the relevant art" for the purpose of solving the Lockwood 001 problem.

Doric's supplementary submissions in respect of s 7(3)

- Doric submitted that a narrower claim may be less likely to be obvious, but 146 only in one of two circumstances:
 - (1)if the additional integers of the narrower claim change the nature of the inventive step; or
 - (2)if the additional integers of the narrower claim affect the prior art base with which the invention is being compared.
- Doric relied on the fact that the primary judge held that the "relevant field is that of manufacture and design of locks"²⁰¹ and on the fact that it had always been common ground that claims 1 and 13 involve precisely the same inventive step, and therefore the relevance of the storeroom locks is precisely the same for claim 1 as it is for claim 13.

The application of s 7(3)

- It is not to be doubted that ss 7(2), 7(3) and 18(1) read together provide that 148 each claim needs to be examined independently of the other claims when considering whether an alleged invention involves an inventive step. It is also axiomatic that an alleged invention in a combination of integers which constitutes a solution to a particular problem must necessarily involve rejecting other combinations of other integers²⁰² as a solution to that particular problem.
- The exercise, of which s 7(3) is an integral part, is the exercise of 149 determining whether "an invention" (s 7(2)) as disclosed "in any claim" (s18(1)) "involve[s] an inventive step when compared with the prior art base" (s 7(2)). The "prior art base" for s 7(2) is enlarged by s 7(3), so as to go beyond common general knowledge and to bring into consideration "prior art information" which "could ... be reasonably expected to have [been] ascertained, understood and regarded as relevant to work in the relevant art" (s 7(3)) by "a person skilled in the relevant

201 (2001) 192 ALR 306 at 335 [165].

202 Alphapharm (2002) 212 CLR 411 at 429 [41] following Minnesota Mining (1980) 144 CLR 253 at 293 per Aickin J; see also Elconnex Pty Ltd v Gerard Industries Pty Ltd (1992) 25 IPR 173 at 184 per Lockhart J.

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art" (s 7(2)). This brings to mind Lord Reid's reference to a "diligent searcher" in *Technograph Printed Circuits Ltd v Mills & Rockley (Electronics) Ltd*²⁰³ and suggests a person skilled in the relevant art familiar with some, but not necessarily every piece of, publicly available information in the relevant art beyond common general knowledge.

Construction of ss 7(2) and 7(3)

The proper construction of ss 7(2) and 7(3) has been considered in *Firebelt Pty Ltd v Brambles Australia Ltd*²⁰⁴ ("*Firebelt*"). In recognising that s 7(3) relaxes the previous rule under the 1952 Act which forbade the use of prior disclosures not proved to be part of the common general knowledge at the priority date, this Court approved a statement by Burchett J in the Federal Court where he noted that s 7(3) in its pre-2001 version is limited²⁰⁵:

> "by the words 'being information that the skilled person ... could, before the priority date of the relevant claim, be reasonably expected to have ascertained, understood and regarded as relevant to work in the relevant art in the patent area'. And if a prior [disclosure] passes those tests, it must still be able to be said that, if that [disclosure] had been considered by the hypothetical skilled person together with the common general knowledge at the relevant time, 'the invention would have been obvious'."

That passage, noting the words of limitation in s 7(3), reflects the two statutory tests which have already been mentioned: the s 7(2) test of whether an invention is obvious when compared with the prior art base, and the s 7(3) test of whether information is to be included in the prior art base, each test to be determined objectively by the standard of "a person skilled in the relevant art".

Given the history, context, purpose and specific words of limitation in s 7(3), all of which were addressed by this Court in *Firebelt*²⁰⁶, the phrase "relevant to work in the relevant art" should not be construed as meaning relevant to any work in the relevant art, including work irrelevant to the particular problem or long-felt want or need, in respect of which the invention constitutes an advance in the art. The phrase can only be construed as being directed to prior disclosures, that is publicly available information (not part of common general knowledge) which a person skilled in the relevant art could be expected to have regarded as relevant to solving a particular problem or meeting a long-felt want or need as the

203 [1972] RPC 346 at 355.

204 (2002) 76 ALJR 816 at 821-823 [31]-[36]; 188 ALR 280 at 287-289.

205 Tidy Tea Ltd v Unilever Australia Ltd (1995) 32 IPR 405 at 414.

206 (2002) 76 ALJR 816 at 823 [36]; 188 ALR 280 at 289.

patentee claims to have done. Otherwise the words of limitation in the last 40 words of s 7(3) would have no role to play. Any piece of public information in the relevant art would be included, as is the case with the much broader and quite different formulation in the cognate provisions in the United Kingdom²⁰⁷, which do not depend on the standard of a skilled person's opinion of the relevance of the information.

- The question of what a person skilled in the relevant art would regard as relevant, when faced with the same problem as the patentee, is to be determined on the evidence. The starting point is the subject matter of the invention to be considered together with evidence in respect of prior art, common general knowledge, the way in which the invention is an advance in the art, and any related matters. It should be mentioned that the starting point is not necessarily the inventive step as claimed, or even agreed between parties, because the evidence, particularly in respect of a combination of integers, may support a different inventive step.
- There was no real disagreement that, however one characterised the problem to be solved, it was a problem with a known product, the Lockwood 001, which was a rim mounted lock. There was no disagreement that each of integers (i)-(v) (in claim 1) and (ix) and (x) (in claim 13) was part of common general knowledge because each was a feature of the Lockwood 001. There was no challenge by Doric to the primary judge's finding that storeroom locks containing integer (vi) were not part of common general knowledge.
- 155 Irrespective of the breadth of claim 1, the person skilled in the relevant art would be seeking to resolve a problem known to exist with a rim mounted lock. The only locks identified as falling within claim 13 and dependent claims were rim mounted locks. Claim 13 did not cover any lock which was not a rim mounted lock with detent means which moved axially.
- The Full Court recognised that Mr Freestone's evidence was directed to the internal workings of various locks which "may well be apposite to the design of a new rim mounted lock, such as an improvement of the old $001^{"208}$. The extra integers of claim 13 (integers (ix) and (x)) deal with the internal workings of the combination claimed, insofar as claim 13 has a cam and a detent means which moves substantially radially of the cam axis.
- 157 There was no evidence from any witness that he would have regarded storeroom locks as relevant to the combination of integers in claim 13, and it was uncontested that the storeroom locks did not have the locking means of claim 13, such locking means being referable to rim mounted locks.

207 Patents Act 1977 (UK), s 2(2) set out above at [58].

208 (2005) 226 ALR 70 at 108 [168].

- Relevantly, the combination of integers in claim 13 included detent means 158 which moved radially of the axis of the cam, such detent means being absent from the storeroom locks which contained detent means which moved axially.
- Further, there was evidence that detent means which moved radially of the axis of a cam were a feature relevant to ensuring outside security after having entered and shut a door. Any solution to the "locked in" problem with the Lockwood 001 needed to preserve that outside security without an occupant of the premises becoming locked in. The storeroom locks which employed detent means which moved axially did not give outside security unless a deliberate step was taken to lock oneself in. The storeroom locks were not perceived as being subject to any problem as they were not necessarily required to give outside security against entry.
- Comparison of the combination of features in the storeroom locks and the 160 combination in claim 13, tends to show that storeroom locks taught away from the invention as claimed in claim 13. That comparison does not immediately lead to any conclusion that the storeroom locks were relevant to the advance in the art represented by the invention in claim 13, or to a conclusion that the invention in claim 13 was somehow obvious on its face.
- The comparison assists in understanding the evidence of witnesses in 161 relation to their perception of the problem with the Lockwood 001 and possible solutions. Mr Garland, a person of inventive faculty, said that if he had been asked to solve the problem he would have considered locks which were rim mounted and those which were not. However, he did not mention storeroom locks, with which he was familiar, as relevant locks to which he would have had regard in solving the problem. He referred only to the DS60 lock (which was not rim mounted and which had a spring biased to the unlatched position and detent means which moved radially to the longitudinal axis) as relevant to solving the problem. Mr Alchin did not mention any storeroom locks, with which he was familiar, as relevant locks to which he actually had regard. He gave evidence that he was inspired by the DS60 However, the primary judge found he was inspired by the new lock. Lockwood 001. Finally, such documentary evidence as there was in relation to the inventor, Mr Blanch, did not contain any reference to storeroom locks.
- As determined by Hely J, the relevant art was the "manufacture and design 162 of locks"²⁰⁹. This was a form of shorthand to describe the field relevant to the invention in claim 13, as Lockwood did, as that of rim mounted locks. This is explained, at least in part, by the fact that detent means which operated radially of the axis of the cam were a characteristic of rim mounted locks. The evidence from all persons skilled in the relevant art showed that the prior art base with which the

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invention in claim 13 needed to be compared depended on the particular combination of integers in claim 13, including integers (ix) and (x).

163 The Lockwood 001 was rim mounted and employed a detent means which 163 moved radially of the axis of the cam; and whilst it ensured outside security against entry, it had the disadvantage of potentially causing a person to be "locked in". It was that combination, and not the integers considered singly, which appears to have affected the skilled persons' perceptions of what was relevant, in the prior art before the priority date, to solving the problem.

164 The skilled persons who gave evidence treated "work in the relevant art" as "work" relevant to resolving the "locked in" problem with the Lockwood 001. None of them contemporaneously regarded the information conveyed by the storeroom locks as relevant to that work and none of them possessed the solution in claim 13, despite their familiarity with one or other of the storeroom locks. Mr Garland understood the workings of the storeroom locks and was well aware of the potential seriousness of the "locked in" problem with the Lockwood 001. He was briefed, as an inventive person, to design a rim mounted dead latch to compete with the Lockwood 001. If he had thought of the solution to the "locked in" problem before the priority date he would have passed it on to Doric. He conceded that solutions he now sees in the field have been seen as he was "looking back on [the particular problem]".

The evidence of what actually happened before the priority date in terms of what was considered by skilled persons (one of whom was inventive) to be relevant to the problem cannot be displaced by constructing a prior art base for claim 13 by reference to the broader claim 1, or by preconceived ideas of the inventive step involved. The facts here lead to the conclusion that the information conveyed by acts of sales of the storeroom locks, assessed by reference to the statutory test in s 7(3), does not qualify as s 7(3) information for inclusion in the prior art base for claim 13.

- It is not, strictly speaking, necessary to go further. But let it be assumed that the information qualified for inclusion in the prior art base for claim 13, pursuant to s 7(3). On that assumption, the question which s 7(2) requires to be asked is: "If that information had been considered by a person skilled in the relevant art together with common general knowledge would the invention in claim 13 have been obvious?" The evidence permits only one answer to that question: No.
- 167 The correct application of s 7(2) in the light of these reasons leads to the conclusion that the combination of integers contained in the invention which is the subject matter of claim 13 involves an inventive step over the prior art base.

Conclusions

- The conclusions arrived at may be summarised as follows. The Full Court 168 erred in finding that there was an "implicit 'corollary' admission" in the Patent specification which led to the result that the solution to the problem with the Lockwood 001 was part of common general knowledge. The Full Court correctly construed the references to "ascertained" and "understood" in s 7(3) of the Act. The Full Court correctly treated the art relevant to the Patent as the manufacture and design of locks. The Full Court was never invited to distinguish between what was "relevant" in respect of claim 1 and what was "relevant" in respect of claim 13 and it did not do so. The Full Court's finding that the sales of the storeroom locks could reasonably be regarded as s 7(3) information leading to the result that the alleged invention in claim 1 would have been considered obvious can hardly be criticised when it is recognised that storeroom locks fall within claim 1, and that the subject matter of claim 1 includes locks which were not rim mounted and rim mounted locks, as well as locks with detent means which moved axially, and locks with detent means which moved radially. However, the inferential conclusion of the Full Court, that claim 13 was obvious because claim 1 was obvious, was erroneous, as has been explained in these reasons.
- Although it is not necessary to this appeal to make any determination in respect of claim 1, a comparison of information disclosed by the sale of storeroom locks with the combination of integers in claim 1 might lead a court to conclude that there was plainly no inventive step involved in that claim when compared with the prior art base enlarged by the information conveyed by sales of the storeroom locks.

Amendment

- 170
- Section 22 of the Act provides:
- "The invalidity of a patent in relation to a claim does not affect its invalidity in relation to any other claim."

Section 138(3)(b) provides that a court "may, by order, revoke the patent, either wholly or so far as it relates to a claim" on the ground "that the invention is not a patentable invention" as required by s 18(1). Section 105 provides that on the application of the patentee a court may, by order, direct the amendment of the patent.

171 Lockwood's primary submission was that there was no need to amend claim 13 if claim 13 is found to involve an inventive step; in the alternative, Lockwood made an application as required under s 105. Doric acknowledged a distinction between amendments of a "consequential" or a "validating" nature but nevertheless submitted that discretionary considerations in this case meant that any rewriting of the Patent's claims may go beyond consequential rewriting.

- Given the course of this litigation and the extant orders for revocation of 172 certain claims in the Patent made by the primary judge, it seems appropriate that orders be made under s 105 to ensure the clarity of the Register, for it records public information, available to be searched by interested parties. There is no implied limitation in s 105 as to orders which can be made. Lockwood made it plain to this Court it does not, and will not at any time in the future, seek any resuscitation of claims 1 and 12 revoked by the primary judge. Lockwood now seeks to amend the Patent by the deletion of claims 1 and 12 and by making consequential amendments to claims 2, 3, 4, 7 and 13. Amendments should be considered after notice to the Commissioner of Patents. It is therefore convenient to remit Lockwood's application to amend the Patent to the Full Court of the Federal Court, leaving it to the Full Court of the Federal Court to determine whether any or all of the matters remitted, excepting the costs of the appeals to the Full Court and the proceeding before the primary judge, are best heard and determined by a single judge of that Court.
- The orders and directions to be made are to be understood by reference to the orders made by the primary judge. The Full Court ordered that, subject to a stay order, claims 1-6, 12-15, 20, 21 and 30-32 be revoked for lack of inventive step. However, the primary judge's findings in relation to the lack of novelty of claims 1-6, 12, 31 and 32, which led to an order for their revocation, were not subject to any appeal in the Full Court. Accordingly, in the light of these reasons, and extant orders made by the primary judge which remain undisturbed, the whole of the Full Court's order in respect of revocation of claims for lack of inventive step must be set aside.

<u>Orders</u>

- 174 The following orders should be made:
 - 1. The appeal against the judgment of the Full Court of the Federal Court be allowed.
 - 2. Order 2 of the orders made by the Full Court of the Federal Court on 20 December 2005, that claims 1-6, 12-15, 20, 21 and 30-32 of the Patent be revoked for lack of inventive step, be set aside.
 - 3. Orders 3, 7 and 8 of the orders made by the Full Court of the Federal Court on 20 December 2005 be set aside.
 - 4. Doric, by itself, its directors, servants or agents or otherwise howsoever during the term of the Patent, be restrained from infringing claims 13, 14, 15, 20 and 30 of the Patent, and in particular from:
 - (a) importing, making, hiring, selling, supplying or otherwise disposing of or offering to make, hire, sell, supply or otherwise dispose of or using or keeping for the purpose of doing any of those things a latch assembly including without limitation the following features:

- (i) a casing;
- (ii) a latch bolt mounted on the casing so as to be movable relative thereto between an extended latching position and a retracted release position;
- (iii) a first actuator operable from an inner side of the assembly to cause movement of the latch bolt to said release position;
- (iv) locking means operable from said inner side of the assembly to adopt an active condition and thereby render said first actuator inoperable;
- (v) a second actuator operable from an outer side of the assembly to cause movement of the latch bolt to the release position;
- (vi) lock release means which is responsive to said operation to the second actuator so as to thereby render said locking means inactive;
- (vii) said locking means including detent means which is movable between an actuator locking position and an actuator release position which corresponds to said active and inactive conditions respectively of said locking means;
- (viii) cam means which is operable to control which of said positions is adopted by said detent means;
- (ix) said cam means including a cam which is movable about an axis of rotation between first and second positions of rotation so as to thereby control said detent means; and
- (x) said detent means including at least one detent which moves substantially radially of said cam axis when moving between said actuator locking and release positions; and
- (b) authorising another person to do any of the acts specified in sub-paragraph (a) above.
- 5. The matter be remitted to the Full Court of the Federal Court for the determination of Lockwood's application to amend claims of the Patent by deletion of claims 1 and 12 and by consequential amendments to claims 2, 3, 4, 7 and 13.
- 6. The matter be remitted to the Full Court of the Federal Court to make orders disposing of the costs of the appeals to that Court and the proceeding before Hely J.

- 7. The matter be remitted to the Full Court of the Federal Court also for the making of further orders and the determination of the remaining issues, including without limitation:
 - (a) orders for delivery up;
 - (b) the issuance of a certificate of validity pursuant to s 19 of the Act; and
 - (c) orders for damages or an account of profits.
- 8. Doric to pay Lockwood's costs of the appeal to this Court.