PATENTS ACT 1977

IN THE MATTER OF a reference under sections 12 and 13 by Richard Munday in respect of European Patent Application No 93917457.9 and related patents and patent applications in the name of RPL Industries Pty Ltd

DECISION

Introduction

1 This reference was originally filed on 26 November 1998 by the claimant, Richard Munday, under section 12 of the Patents Act 1977 ("the Act") to determine the question of his entitlement:

"... to the grant of a patent or patents in respect of the invention or inventors [*sic*] described and claimed in European Patent Application No. 93917457.9 derived from International Patent Application No. PCT/AU 93/0042 [*sic*] and claiming priority from Australian Patent Application No. PL 4315 filed 26th August 1992, and corresponding patent family member [*sic*] including Australian Patent No. 46922/93, US Patent No. 565539 [*sic*], South African Patent No. 9300554 and Singapore Patent No.45137."

The reference was amended on 7 January 1999 so as also to determine under section 13(3) whether he ought to have been mentioned as the inventor in place of or in addition to the currently named inventor in respect of the inventions.

- European Patent Application No. 93917457.9 ("the European application") was allocated the publication number EP 0658238. It was not reprinted, and its contents are those of International Patent Application No. PCT/AU 93/00421 ("the PCT application") from which it was derived and which was published on 3 March 1994 as WO 94/04781. The applicant of the European and PCT applications is RPL Industries Pty Ltd ("RPL") and the named inventor is Russell Phillip Long. According to the claimant's statement the applicant or proprietor of the corresponding patent family members is also RPL, and the named inventor is Mr Long. On 11 March 1999 a counterstatement was filed by Mr Long as the Managing Director of RPL, the defendant opposing the reference.
- 3 Evidence rounds followed fairly smoothly until a flurry of activity over late-filed evidence and the attendance of witnesses in the weeks leading up to the hearing. I shall return to those matters shortly. Some uncertainty also arose just before the hearing as to whether the claimant, who had until then been represented by patent agents Roystons, would be represented or even appear at the hearing. In the event, at the hearing which went ahead as arranged on 2 October 2000, the claimant, Mr Munday, appeared in person and Mr Richard Hacon, instructed by patent agents J A Kemp & Co, appeared as Counsel for the defendant.

Evidence and witnesses

- 4 Written evidence was filed by the claimant in July and September 1999 and February 2000 and up to that point comprised statutory declarations with exhibits from: Richard Munday himself (two); John Harold Edwards, Mr Munday's senior colleague in Yamato Lock Inspection Limited (two); and Martin Priestley, owner of Primar Precision Engineering Company (one). Written evidence was filed by the defendant in December 1999 and up to that point comprised statutory declarations with exhibits one each from: Russell Long himself; Steven Mark Wynn, at the relevant time Locksmith Manager for Security Locksmiths; Geoffrey John Watt, senior partner of Watt and Paulberg Architects, and a friend of Mr Long; John Ernest Oretti, Director and Senior Designer with Bayly Design; Terry Lillis, Director of C&L Investments; and Malcolm John Cooper, Sales Manager with Bridge Electrical Service Pty Ltd.
- 5 Shortly before the hearing, requests were made by both sides for the admission of further evidence well after the normal rounds had been completed. First of all, the defendant requested in a letter of 1 September 2000 the admission of two new items of evidence: drawings which Mr Long had received from Mr Munday; and a statutory declaration from Mr Ray Chamula, a corporate documentation consultant. In a letter of 21 September, the claimant stated that it had no objections to these items being introduced, and foreshadowed the filing of further evidence himself. In a further letter of 26 September, the claimant submitted seven additional items of evidence.
- 6 I considered the admission of these nine items of additional evidence as a preliminary point at the hearing. As recorded in the hearing transcript, after listening to argument from both sides I gave a reasoned oral decision, the result of which was the admission of both items filed by the defendant, and some parts only of two items filed by the claimant, namely paragraphs 1 to 9 and 13 to 17 inclusive of a third statutory declaration by Mr Munday, and paragraphs 1 to 9 and 16 to 19 of a statutory declaration by Robert Bruce Weir, a former employee of RPL.
- 7 Arrangements had been made through agreement between the parties, and with my consent, for certain of the witnesses to attend the hearing in person for cross-examination, while others would be cross-examined by means of a videolink to Australia where they are based. In the event, the parties' desire to cross-examine one another's witnesses diminished immediately before the hearing, so that at the hearing Mr Hacon for the defendant wished only to cross-examine Mr Munday, and Mr Munday, the claimant, wished only to cross-examine Mr Long. Since both were present at the hearing, all the cross-examination took place before me. I shall return later to the impression these two witnesses created on me.
- 8 I was grateful to Mr Hacon for his written skeleton argument. None was provided by the claimant, but I make no point of this since Mr Munday was representing himself. Indeed, I should make clear that in recognition of that fact I have been especially careful in considering the arguments supporting his case.

The Law

9 I think it would be helpful if at this point I deal briefly with the legal framework within

which the present reference stands. It is made principally but not exclusively in respect of the European application under section 12 of the Act, which governs the determination of questions of entitlement to foreign and convention patent applications. The relevant parts of section 12 read as follows:

"12.- (1) At any time before a patent is granted for an invention in pursuance of an application made under the law of any country other than the United Kingdom or under any treaty or international convention (whether or not that application has been made)-

(a) any person may refer to the comptroller the question whether he is entitled to be granted (alone or with any other persons) any such patent for that invention or has or would have any right in or under any such patent or an application for such a patent; or

(b) ...

and the comptroller shall determine the question so far as he is able to and may make such order as he thinks fit to give effect to the determination.

(2) ...

(3) Subsection (1) above, in its application to a European patent and an application for any such patent, shall have effect subject to section 82 below."

- 10 As regards the patents and applications specifically mentioned in the reference, other than the European application, I have noted the likely limits on the comptroller's jurisdiction asserted by Mr Hacon in paragraph 2 of his skeleton and at the hearing. He did, however, agree that I could make a finding on the facts in relation to the invention, and for the moment that is all I am concerned with. To what extent I need to return to the point in the context of making an Order will depend on that finding.
- 11 In regard to the European application, further provisions come into play, beginning with section 82 of the Act. The relevant part of section 82, to which section 12(3) quoted above refers, reads as follows:

"**82.-**(1) ..

(2) Section 12 above shall not confer jurisdiction on the comptroller to determine a question to which this section applies except in accordance with the following provisions of this section.

(3) This section applies to a question arising before the grant of a European patent whether a person has a right to be granted a European patent, or a share in any such patent, and in this section "employer-employee question" means any such question between an employer and an employee, or their successors in title, arising out of an application for a European patent for an invention made by the employee.

(4) The court and the comptroller shall have jurisdiction to determine any question to which this section applies, other than an employer-employee question, if either of the following conditions is satisfied, that is to say-

(a) the applicant has his residence or principal place of business in the United Kingdom; or

(b) the other party claims that the patent should be granted to him and he has his residence or principal place of business in the United Kingdom and the applicant does not have his residence or principal place of business in any of the relevant contracting states;

and also if in either of those cases there is no written evidence that the parties have agreed to submit to the jurisdiction of the competent authority of a relevant contracting state other than the United Kingdom.

(5) The court and the comptroller shall have jurisdiction to determine an employer-

employee question if either of the following conditions is satisfied, that is to say-(a) the employee is mainly employed in the United Kingdom; or

(b) the employee is not mainly employed anywhere or his place of main employment cannot be determined, but the employer has a place of business in the United Kingdom to which the employee is attached (whether or not he is also attached elsewhere);

and also if in either of those cases there is no written evidence that the parties have agreed to submit to the jurisdiction of the competent authority of a relevant contracting state other than the United Kingdom or, where there is such evidence of such an agreement, if the proper law of the contract of employment does not recognise the validity of the agreement."

- 12 Having considered the terms of section 82, I am satisfied that its conditions are met and that I have jurisdiction to hear the matters raised in these proceedings.
- 13 Still having regard to the European application, I note that Article 60(1) of the European Patent Convention states that:

"The right to a European patent shall belong to the inventor or his successor in title..."

In paragraph 4 of his skeleton and at the hearing, Mr Hacon suggested that the correct enquiry in the present case is to identify the person or persons responsible for the inventive concept, citing in support the authority of *Henry Brothers (Magherafelt) Ltd v The Ministry of Defence and the Northern Ireland Office* [1999] RPC 442 and [1997] RPC 693. Although he acknowledged that the precedent case arose in the context of section 72 not section 12, I accept that the enquiry as he frames it is the appropriate one, being consistent with the terms of Article 60(1).

The applications in suit

As I have mentioned, the specification of the European application as filed and published does not exist separately from that of the PCT application from which it is derived. The PCT application was filed on 18 August 1993, claiming priority from Australian patent application PL4315 dated 26 August 1992, and relates to padlocks. The PCT specification explains that conventional padlocks are relatively easy to force open by forcing the shackle from the body, and that even hardened padlocks can be forced in this way by using a suitable wrench.

- 15 As particularly described and shown in figures 1 to 6, a padlock comprises a body 2 and a curved bolt or shackle 4. The shackle is held in a locked condition in the body by locking means 16 and a locking mechanism 20 releasable by a key. The specification acknowledges on page 2 that the lock mechanism 20 and the locking means 16 can be of substantially conventional construction. In figures 1 to 3 and 6, the body 2 consists of a substantially cylindrical inner body part 6 on which is rotatably mounted by bearings 26 a substantially cylindrical outer body part 24. The cylindrical shape of the outer body part and its rotatable mounting prevent a wrench from being applied to the body to force open the shackle about a longitudinal axis. The outer body part 24 may have a shape other than cylindrical. For example, in figures 4 and 5 it is respectively convex and concave.
- Page 3 of the specification goes on to say that "we have also determined that for proper security it is necessary to configure the body so that a wrench cannot be applied to the body with the ends of the body held firmly between the jaws of the wrench". This is achieved by forming the shackle end portion of the body with a generally conical shape. This, it is said, provides a minimum of surface area on which a wrench jaw can grip. This conical end portion 28 is formed as an extension of the inner body part 6, and may have a cut-away 32 to enable the shackle to be swung open more readily. In the embodiment of figure 6, the opposite end of the inner body part is also provided with a conical formation 36 which minimises at that end the transverse surface area on which the jaw of a wrench can grip.
- 17 There are five claims which read:

"1. A padlock comprising a body and a shackle mounted on the body for movement between a closed, locked position and an open, released condition, wherein the body comprises an inner body part which mounts the shackle and an associated locking mechanism, and an outer body part mounted on the inner body part for rotation about the longitudinal axis of the body, said outer body part having a length sufficient to shield the inner body part against the application of a torque acting about the longitudinal axis of the inner body part to force the padlock, and the body having at least at one end portion a formation which progressively reduces in cross-sectional dimension whereby to impede the application of a wrench to the body such that the jaws of the wrench are applied to the opposite ends of the body.

2. A padlock according to claim 1, wherein the said formation is a generally conical formation on the inner body part at the shackle end of the body.

3. A padlock according to claim 1 or claim 2, wherein the said formation is a generally conical formation at the end of the inner body part remote from the shackle end.

4. A padlock according to claim 3, wherein the conical formation is cut away at one side to permit the shackle to swing between an open and closed position.

5. A padlock according to any one of claims 1 to 3, wherein the outer body

part is of annular section and surrounds the inner body part over a substantial portion of the length of the inner body part."

18 I was not taken at the hearing to the content of the other applications or patents embraced by the reference either generally by the term "corresponding patent family member" or specifically by number. Both parties seemed very much concerned to base their cases on the European and hence PCT applications.

The inventions in issue and not in issue

- 19 Having said that, I cannot pass on to consider the inventions in issue in these proceedings without noting one feature which was not in issue, and that feature is not part of the European or PCT applications. The feature to which I am referring involves the use of a circlip to retain the outer body part on the inner body part. From paragraph 6 of the defendant's counterstatement, paragraph 4 of Mr Long's second statutory declaration, and his admission in cross-examination that Mr Munday had come up with the use of the circlip, it is clear that it is not in dispute that Mr Munday and not Mr Long devised that feature. Mr Hacon acknowledged that this may have some relevance to the US specification, namely US 5655391 (misquoted in the claimant's statement), where the feature appears, even though it does not form part of the European or PCT applications.
- 20 It is also fair to say that entitlement in certain other aspects of the European and PCT applications is not in dispute either. As will be seen when I move to consider the history of events, it is accepted that an earlier form of padlock having an outer body part rotatably mounted on an inner body part by bearings was the subject of an earlier patent by Gary Coccetti, namely WO 85/01981 exhibited at RL1 to Mr Long's first declaration. This so-called Spinner lock was the basis for subsequent development work but neither Mr Long or Mr Munday is laying any claim to having devised those features.
- 21 Turning then to matters in dispute arising from the European and PCT applications, while it is always possible as a strict analytical exercise to divide a specification into a fairly large of number of theoretical concepts which might in the broadest sense be termed "inventions", it seems to me that there is now only one concept with which I need to be concerned in these proceedings. The disputed concept may be expressed, in my words adapted from claim 1, as follows:

A padlock comprising a body which has at least at one end a formation which progressively reduces in cross-sectional dimension.

- 22 My formulation for this concept reflects the breadth of claim 1, and as such is broader than the conical formation or "conical top" about which both parties almost invariably spoke. I should make clear that I do not see any significant practical difference between the two for the purposes of determining entitlement in the feature; the broader expression is the natural result of patent claim drafting based on the narrower one. **History**
- 23 There are three distinct phases in the events which took place. The first concerns what happened in Australia up to about the end of 1991 (although I draw no sharp demarcations). In this phase, Mr Munday had not appeared on the scene. The second

phase is early 1992, beginning when Mr Munday met Mr Long and ending in March 1992. The third runs from April 1992, and for reasons which will become clear has no relevance to these entitlement proceedings.

Phase 1: Up to the end of 1991

- 24 The principal evidence on behalf of the defendant, RPL, is given by Mr Russell Long. In his written evidence, he explains that he was introduced by Terry Lillis in 1987 to what he calls the original Coccetti invention of a very basic padlock with a rotating outer sleeve. As I have mentioned, Gary Coccetti had applied for a patent (WO 85/01981) and he and Mr Lillis were commercialising it under the name of the "Spinner Padlock" or Spinner lock. In late 1989, Mr Lillis told Mr Long that he and Mr Coccetti were not having any substantial success in marketing the Spinner lock and Mr Long suggested that he take it on. Mr Lillis's evidence confirms this.
- 25 At this time, Mr Long was the Managing Director of his own two companies; one was RPL and the other was Bridge Electrical Service Pty Ltd ("BES"). In 1990 Mr Long made enquiries and employed Mr Malcolm Cooper, partly for his knowledge of padlocks, but other commitments meant minimal work was carried out in 1990. In late 1990, Malcolm Cooper met Steven Wynn, a locksmith, who showed a strong interest in the Spinner lock and introduced him to Mr Long. Mr Wynn provided technical advice, and evaluated the Spinner lock as needing improved shackle protection, having a poor keying system and being bulky. This is supported by Mr Wynn in his declaration, where he adds that he then advised Mr Long that the Lockwood 247 was Australia's most popular padlock which he should use as his design benchmark.
- 26 Paragraphs 15 to 18 of Mr Long's first statutory declaration are worth quoting virtually in full:
 - "15 Steven Wynn also explained that the two most common methods used to break into padlocks were bolt cutters and hammering, which led to the first destruction tests of the Spinner lock including hammering. After continued hammering the Spinner lock failed.
 - 16 I had been considering a way of making the Spinner lock more appealing by contouring the overall shape and rounding off the top of the Spinner lock. Following the hammering test I now deducted that by reshaping and including a conical top it would also make it far more difficult, if not impossible, to get a clean hammer blow on the a [*sic*] lock as was possible in the case of the Spinner lock.
 - 17 In early 1991 we carried out more extensive research into the padlock market to assess where the potential of the "Rotating Padlock" lay. ...
 - 18 As a result of this research it was determined that the Spinner lock would have to be redesigned. The other concern was to create an awareness of the weakness of conventional padlocks."
- 27 These paragraphs of Mr Long's evidence appear to place the conception of the "conical

top"as being made by him during the period between "late 1990" and "early 1991".

- 28 On 26 March 1991 Mr Long met Geoff Watt, a friend who was the senior partner in an architectural and project management firm. At the meeting Mr Long "clearly explained by means of sketches that the new design would have to include a conical top". The sketches exhibited at RL3 to Mr Long's first declaration are he says "of a similar type" to those drawn at the meeting with Geoff Watt. I am prepared to accept that some of the padlocks sketched there have a generally conical top. In his own statutory declaration, Mr Watt confirms the meeting with Mr Long took place, and describes what was discussed, including what I might summarise as the functional and aesthetic problems of the Spinner lock. He goes on to say that he "can clearly recall that Russell Long explained that the solution to both these problems was to include a tapered or conical top in the new design and that he produced sketches to further illustrate his ideas." These sketches were "of a similar type" to some which Mr Watt exhibits.
- 29 On the recommendation of his Marketing and Strategic Planning Consultant, Ray Chamula, in late March/early April Mr Long had a video produced to demonstrate the weakness of conventional padlocks and of the Spinner lock.
- 30 Mr Long's first declaration goes on to say that on 9 April 1991 he met Mr Watt again, together with John Oretti of Bayly Design, to discuss having development drawings made for the new design including the conical top. Mr Watt's declaration explains that Bayly Design specialised in industrial design and product development, and otherwise supports Mr Long's account. A statutory declaration from Mr Oretti, who describes himself as a Director and Senior Designer with Bayly Design, is similarly supportive. He says how Mr Long explained by means of sketches, "similar to those" exhibited by Mr Oretti, how he wanted to develop the Spinner lock to include a conical top. The conclusion was that Mr Long needed to determine the more technical aspects of the design and locksmith requirements.
- 31 Mr Long's and Mr Wynn's declarations, in very similar terms, say that they met and that Mr Long explained the conical top to Mr Wynn "... by means of sketches ... of a similar type" to some they exhibit. Mr Wynn clearly recalls that meeting as being around April/May 1991. Mr Wynn also comments that "during this period", though exactly what period is not entirely clear, on several occasions he was involved in discussions with Russell Long, Ray Chamula and Malcolm Cooper, and summarises in paragraph 12 of his declaration that he can most certainly recall that before Christmas 1991 Mr Long had decided to have prototypes of the redesigned Spinner lock, including a conical top, made.
- 32 In July 1991 Mr Long travelled to Alice Springs where he had preliminary discussions with Mr Lillis about an agreement with him and Mr Coccetti, the owners of the Spinner lock, whereby Mr Long would pursue his redesigned version. Mr Long says the keying issue was discussed and he made sketches. Mr Lillis confirms the meeting and adds that "... by means of sketches ... similar to ..." ones Mr Lillis exhibits Mr Long proposed a raised tapered top or conical top to the padlock. Mr Lillis also gave Mr Long details of a Taiwanese padlock manufacturer with whom he had been dealing. The rights to develop and market the rotating lock described in the Coccetti patent were assigned to Mr Long on 14 November 1991. Around this time, Mr Long renamed his design the Rotalok, although this name may have been coined informally before that.

33 On 11 December 1991, Mr Long met his patent attorneys, Davies Collison Cave, to establish the status of the Coccetti patent and it appeared that the only valid patent was the Taiwanese one. This information was only divulged to Mr Lillis and Mr Chamula, according to Mr Long because the exact status had not been determined and it may have been possible to rectify.

Phase 2: Early 1992

- 34 I turn now to the phase of the story where Mr Munday, the claimant, became involved. This was preceded by a visit to Australia by John Edwards, Mr Munday's senior colleague and export manager for Yamato Lock Inspection Systems ("Yamato"), for which Mr Long's company BES acted as distributor. According to Mr Long, this visit took place in May 1991 and he showed Mr Edwards the video of the Spinner lock and explained that it was being completely redesigned. Mr Edwards in his statutory declarations confirms the visit and that he was shown the video, but says it was late 1991 and denies that there was any mention of redesign.
- 35 Mr Munday, in his evidence-in-chief, presents his recollection of events in this phase quite briefly. In February 1992 he met Mr Long in Indonesia where they spent ten days together on business concerned with metal detectors and check-weighing apparatus. He then travelled with Mr Long to Australia where they spent another five days together, and it was during this time that Mr Long stated he had a patent on a rotating sleeve padlock. Mr Long had stated that the design of that padlock used rotating element bearings but was impractical to manufacture. Mr Long showed him a video and a sample of a second design of rotating sleeve padlock which had a thin gauge sleeve which had been rolled onto the inner body. Mr Long considered this second design inadequate because it could be forced by gripping or hammering, as shown in the video, and the sleeve could be removed by a chisel. Mr Munday says "Mr Long did not have the solution to these problems and stated that if I could resolve these problems I would be involved in the future of the project".
- 36 According to Mr Long, it was following communications with John Edwards that he travelled to Indonesia and met his assistant, Richard Munday, on Yamato-related business. Mr Long also says that they spent ten days in South-East Asia, although he does not say when, and that he outlined the Rotalok project to Mr Munday. They then travelled to Australia and spent another five days together there, when Mr Munday agreed to become involved. Mr Long says, in paragraph 71 of his first declaration, that he showed him the Spinner lock and the video, explained the R&D that had been undertaken during 1991 and broadly outlined the new design including the conical top "... by means of sketches ... of a similar type ..." to ones exhibited. Mr Munday in paragraph 3.15 of his second declaration strongly denies this, stating categorically that Mr Long did not outline a new design which included a conical top and did not show him any sketches of a rotary sleeve lock with a conical top; Mr Long never showed him any sketches of padlocks with conical tops.
- 37 Mr Long discussed with Mr Munday the steps involved in getting prototypes made. According to Mr Long in paragraph 74 of his first statutory declaration, Mr Munday offered to carry out this work at no cost to Mr Long provided he was included in the

"bigger picture", and Mr Long proposed that Mr Munday could become involved in the project for the UK on the basis that he complete the drawing works and subject to entering into a formal agreement. In his evidence-in-reply, Mr Munday says he agreed to do the design work for nothing on the basis that if it went forward he would be involved in the commercialisation and receive appropriate reward.

- 38 Mr Long arranged for him and Mr Munday to meet Mr Chamula after hours. According to Mr Long, they discussed Mr Munday's capacity to complete the drawings, which were to include the conical top, and he explained the design including the conical top in more detail by means of sketches of a similar type to those exhibited. It was agreed that Mr Munday would undertake the job of producing the drawings to include modifications as directed by Mr Long. In his statutory declaration, Mr Chamula recalls meeting Mr Munday in March 1992 and his account largely corroborates that of Mr Long. In particular, he mentions that among the issues discussed were the design of the keying system, to be based on the Lockwood 247 padlock, and the sloping or conical top.
- 39 Mr Munday in his second declaration confirms that the meeting in Mr Chamula's office took place, but denies, among other things, that there was any mention that the designs were to include a conical top or that sketches were shown or produced.
- 40 Mr Long also introduced Mr Munday to Mr Wynn. Mr Wynn's evidence is that he met Mr Munday after hours in March 1992 and gave him a crash course in key systems and the working of padlocks. He also gave him an unassembled Lockwood padlock, some padlock parts and a drawing. During the meeting all aspects of the Rotalok project and his involvement were he says discussed. Mr Wynn also confirms "that the design feature of the conical top that Russell Long had devised had been clearly conveyed to Richard Munday, and it was to be an integral part of the new design that Russell was now ready to have drawn up". Mr Munday in his evidence remembers meeting Mr Wynn but does not recall him talking, among other things, about research and development or the problems, and says there was no mention of the conical top.
- 41 Mr Long says that Mr Munday was provided with sketches and other drawings and information, including a sample of the Spinner lock, to use in the production of working drawings. On 5 March 1992 Mr Munday returned to the UK, in Mr Long's words from paragraph 88 of his first declaration, "... with the specific intention of drawing up the equivalent of a Lockwood 247 padlock with a conical top devised by me and having a rotating sleeve equivalent to that of the Taiwanese made "Spinner" Lock as directed by me".
- 42 Mr Munday's evidence is that within two weeks of returning to England, he sent Mr Long sketches of his design which solved the problems which had been outlined to him. He says he redesigned the padlock to include a conical top and an outer sleeve secured by a circlip. These were conceptual features of his devising. Although he was unable to locate the original sketches produced at that time, he exhibits at RM2 a drawing which illustrates the features he says he designed and communicated to Mr Long to solve the problems which Mr Long had outlined to him. He categorically denies that the solutions to the various problems were communicated to him by Mr Long during their meetings in Australia. Mr Weir, an employee of BES and RPL, testifies that he had not seen or heard of the conical top until Mr Munday's drawings were faxed to RPL. This is not, however,

evidence about what Mr Long may, or may not, already have done, but simply a reflection of Mr Weir's own personal knowledge.

43 Mr Long's evidence is that Mr Munday sent him two development drawings on 16 March 1992. These are exhibited to Mr Long's second declaration. Both drawings RL2-1 and RL2-2 show a padlock with a conical top. Mr Long says that RL2-1 is identical to his sketches shown to Mr Munday and that it confirms that Mr Munday had produced drawings as Mr Long had instructed. RL2-2 he says shows Mr Munday's option of fitting the sleeve using a circlip.

Phase 3: Thereafter

44 I do not believe I need to recount the story further in time beyond 16 March 1992, although there is evidence about events in that later period. As Mr Hacon put it at the hearing, on that date Mr Long saw Mr Munday's drawings showing the conical top, and the question is whether Mr Long had already come up with the conical top by that date. As everything which took place after the devising of the invention is largely irrelevant for the determination of entitlement, everything that happened after 16 March 1992 is irrelevant.

Inventorship

- 45 From this review of events as presented in the evidence of the parties, several things are clear. First, crucial to the determination of inventorship of (and hence entitlement in) the disputed concept is the issue of whether Mr Long devised the concept before meeting Mr Munday, and more especially whether he did so before receiving drawings from Mr Munday on 16 March 1992. Mr Long says he did, Mr Munday says that he devised the concept in creating those drawings.
- 46 In favour of Mr Long's assertions is a wealth of supporting testimony from other witnesses. I have already represented that fairly in recounting the history, but I think the point can be sharply demonstrated by quoting short paragraphs from the evidence of Mr Long and each of his six supporting witnesses. Taking each in turn:

Mr Long (first

- declaration): "64. It can be clearly seen from the above information that I had carried out extensive Research and Development work to determine the problems and solutions of the Spinner lock including devising the conical top.
 65. Before Christmas 1991 I was ready to have drawings prepared and prototype samples made, of the re-designed Spinner lock, equivalent to a Lockwood 247 padlock, with a rotating sleeve and a conical top, which I called the Rotalok."
- Mr Wynn: "12. ... I can most certainly recall that before Christmas 1991, Russell Long had decided to have prototypes of the redesigned Spinner Lock made and include the following improvements; Conical top ..."
- Mr Watt: "24. I can confirm that Russell Long disclosed the fact that he had

devised this innovation of making the new lock with a conical top early in 1991."

- Mr Oretti: "28. In closing I can confirm that Russell Long had tabled the conical top and explained this by means of sketches to me at our first meeting in April 1991."
- Mr Lillis: "18. In confirm that all the improvements made to the Spinner lock which are embodied by the lock known as "Rotalok" were conveyed to me by means of discussions and sketches during Russell Long's visit to Alice Springs in July 1991 and in particular the conical top which I believe is the subject of the claim."
- Mr Cooper: "20. There is no doubt in my mind that as a result of all the research and development work carried out as mentioned before 1992, Russell Long had devised the solutions to all of the problems of the Spinner lock including the conical top."
- Mr Chamula: "21. I confirm that Russell Long and I and those of his staff involved with the padlock were fully aware of the shortcomings of the original spinner lock as early as April 1991 ...
 22. ...
 23. We were equally aware of his approach to solving these with a conically sloping top."
- 47 As Mr Hacon pointed out at the hearing, since none of the defendant's six witnesses additional to Mr Long was cross-examined on their evidence, it stands unchallenged. Mr Hacon fairly acknowledged that Mr Munday, representing himself at the hearing, would not be expected to know that; but equally he was right in going on to say that Mr Munday had been receiving legal advice which should have alerted him to the point. On the basis of this unchallenged corroboration, Mr Long's claim seems to have solid support. On the other hand, Mr Munday has no corroborating testimony from other witnesses save Mr Edwards and Mr Weir. As I have noted already, Mr Edwards in his second declaration specifically disagrees with Mr Long on the point of what they discussed. This conflict remains unresolved, although Mr Long was cross-examined and Mr Edwards was not; but in any case nothing turns on this point, even I think Mr Long's credibility, given the weight of other factors. As for Mr Weir, I have also noted that his evidence does not show that Mr Long could not have made the invention whereas Mr Long and six other witnesses say he did. Thus, the weight of evidence is strongly, even overwhelmingly, in favour of Mr Long's account, not Mr Munday's. However, even Mr Hacon did not leave it at that, and he went on to deal with what Mr Munday said.
- 48 If I set to one side for the moment Mr Long's supporting witnesses, what I face is a conflict of evidence between the two principal witnesses, Mr Long and Mr Munday. Both were cross-examined by the other side, and I must consider what impression each of them created on me in that cross-examination, and hence what credibility and weight I should attach to what each says.
- 49 Taking first Mr Long, he seemed to me relaxed and confident in his testimony and in

having it challenged in the witness box. He explained himself clearly and chose his words carefully so that they conveyed his intended meaning. I felt occasionally that his words might have been designed to be both objectively accurate and yet subjectively to convey a slightly different impression, but he was robust when challenged and his account held together. For example, when questioned about what he knew when concerning the status of the Coccetti patent, his testimony remained steady. I believe on this basis that his evidence was reliable. Although Mr Long was challenged on his evidence in his cross-examination by Mr Munday, I do not believe that the cross-examination illuminated any new areas for me.

- 50 Mr Munday was more subdued in cross-examination by Mr Hacon. He seemed earnest, but occasionally seemed as though he was trying more to make a point rather than answer questions put to him. Under cross-examination, Mr Munday initially stuck to his position that Mr Long did not tell him of plans to make a modified Spinner lock or mention a conical top. But he admitted that Mr Long had told him about shortcomings of the Spinner lock, and had indicated that he wanted to make it better, an improved Spinner lock. When asked by Mr Hacon about Mr Long's sketches, Mr Munday was grudging about any information that could be taken from them. His underlying line was "I have never seen sketches like that before". When pressed, he qualified what he meant: you could not make a manufactured product from those drawings; those sketches do not represent anything other than doodles; grudgingly, you would have to give drawings like that to a draughtsman who would make them into something practical. It seemed to me that Mr Munday, by these answers, was suggesting that because Mr Long's sketches were not proper drawings they could not be considered as imparting any technical information. If that was indeed the position Mr Munday was driving at, it strikes me as extreme and unsustainable. Mr Hacon also took Mr Munday to exhibits RL2-1 and RL2-2, the drawings he had sent Mr Long on 16 March 1992. On RL2-2, Mr Hacon asked Mr Munday to compare it to page 2 of exhibit GW5 (headed "80 column data sheet"), one of Mr Long's sketches, and especially the left-hand drawing on that page. Mr Munday admitted the two drawings, his and Mr Long's, were very similar, and implied that Mr Long had copied him, not the other way around.
- 51 All in all, I do not believe the cross-examination of either witness assisted me greatly. Neither witness's credibility was materially impugned by the process, no retractions or amendments of evidence elicited.
- 52 Mr Hacon suggested that Mr Munday's position was that while Mr Long had explained all the shortcomings of the Spinner lock to him, he had said nothing about proposed solutions nor made any sketches. He also noted Mr Munday's implication that Mr Long's exhibited sketches copied Mr Munday's, not the other way around. This would require, Mr Hacon pointed out, all the defendant's witnesses to be lying about Mr Long having made sketches of the type they speak of, or at all. Mr Hacon's conclusion is that Mr Munday has mis-remembered or persuaded himself that it was he who came up with the conical top. Mr Munday based his submissions and cross-examination at the hearing on the lines that if Mr Long had thought of the idea of the conical top, he would have done something about it a long time before he, Mr Munday, was involved. I have to say that this seems to me speculation, not evidence-based argument, and in any case Mr Long came forward with feasible business-based reasons why he had not proceeded further with the project sooner.

- 53 It seems to me that Mr Long's account stood up to the scrutiny of cross-examination, and he has the unchallenged evidence of six other witnesses to support his position that he spoke about and sketched the conical top in 1991. Mr Munday has none to support his position as to what was actually said or shown at the relevant meetings he had in Australia in early 1992, nor to support his proposition that his drawings of 16 March 1992 were the first made of the conical top, and that Mr Long's sketches are copies of his, not the other way around. On the balance of probabilities, the consequence is clear and inevitable: the claimant, Mr Munday, has not discharged the onus on him to show that he, not Mr Long, devised the conical top. Rather, the reverse is the case; the defendant has shown that Mr Long devised that feature.
- 54 I should say though that in reaching this conclusion, one to which I am clearly driven on the evidence, I am not without some reservations. It does strike me as surprising that through all his research and development, meetings and discussions up to the end of 1991, neither Mr Long nor any of the defendant's other witnesses can produce a single drawing whose date can be established at that time. Mr Munday makes pretty much this point in paragraphs 3.2, 3.7 and 3.13 of his second declaration, and he pressed Mr Long on it when cross-examining him. Although I had noted Mr Long's open comment on the point in paragraph 22 of his first declaration, I too asked him about it at the hearing. As far as I could understand his response, it was that the sketches he put in evidence were either made in the period up to the end of 1991, or closely resemble ones that were. Clearly this is not a definitive answer, but he also made the point that all his supporting witnesses are saying of the exhibited sketches "if that is not the one, you certainly did one the same as that". This is the key point, which Mr Munday's criticism of a lack of dated drawings in the evidence put in by the defendant cannot gainsay.
- 55 In reading the defendant's witnesses' declarations I was also struck by a remarkable similarity in the wording used to describe Mr Long's sketches, this being along the lines of "...by means of sketches of a similar type ...". I am prepared to attribute this to the not unusual "lawyering" to which the declarations were probably subject and which can lead to similarities in phrasing without affecting the underlying truth of the testimony being given.
- 56 My conclusion on inventorship then is that Mr Long was the deviser of the disputed feature, namely the conical top.

Entitlement

- 57 It follows from my finding on inventorship that Mr Long is entitled to the benefit of his invention, the conical top, unless some enforceable agreement renders otherwise. The position, it seems to me, is that RPL as the applicant for or proprietor of the patent applications and patents in suit is entitled by virtue of being Mr Long's company. Mr Munday has put in no argument on entitlement separate from that on inventorship. I therefore find that the defendant, RPL, has the entitlement in the feature of the conical top.
- 58 I should also note here that it has already been conceded by the defendant that the circlip feature was devised by Mr Munday, and that there has been no suggestion from the defendant that he should not be entitled to it.

Order as to Entitlement and Inventorship

- 59 Mr Hacon, as I have already acknowledged, pointed out the limits of the comptroller's jurisdiction under section 12. I quite take the point he made. By its very nature, a reference under section 12 is concerned with foreign or convention applications. In the present reference, while the principal focus has been on the European application, a number of foreign cases are mentioned by number, while others are embraced by a general mention of corresponding family members. Although I am aware that the Patent Cooperation Treaty does not include provisions that govern entitlement, this being a matter for the law of each designated state, and I have some general awareness of the laws of some of the states involved, that knowledge is neither sufficiently detailed or broad. In any event, it would be wrong for me to proceed on such a basis.
- 60 I therefore believe it is right that I should limit my Order to a Declaration based on my findings. These are largely concerned with the disputed concept of the conical top. However, I do not believe I should lose sight of the circlip feature which, although absent from the European application to which I have chiefly been taken, may on Mr Hacon's admission have some relevance to US 5655391 cited in the reference, and maybe to other family members as well.
- 61 On that basis, I make the following **Declaration**:

(i) Having carefully considered all the evidence and argument before me, I have found that Russell Phillip Long was the deviser of the concept of a padlock in which the body has at least at one end a formation which progressively reduces in cross-sectional dimension (the so-called "conical top"), and accordingly that entitlement in this concept belongs to RPL;

(ii) I also note that it was not disputed by RPL that the concept of using a circlip to retain an outer body part of a padlock rotatably on an inner body part was devised by Richard Munday and that he is entitled to it.

Order as to Costs

62 Costs awards in proceedings before the comptroller are usually nominal contributions derived from the application of a scale published from time to time. At the hearing, both sides asked for their costs from the normal scale, and I see nothing in the circumstances of this case which justifies a departure from that approach. Since the defendant has won on the disputed issues, it is entitled to an award of costs. On this basis, I order that Mr Munday should pay RPL the sum of £1000 as a contribution to its costs.

Appeal

63 This being a decision other than on a matter of procedure, any appeal shall be filed within six weeks from the date of the decision.

Dated this 14th day of February 2001

S N DENNEHEY Divisional Director, acting for the comptroller

THE PATENT OFFICE