CHAPTER 6

Construction of a Patent

Synopsis	े
Introduction1	35
GENERAL PRINCIPLES OF CONSTRUCTION1	
Form and Structure of Claims1	

Introduction

- 6.1 The construction of a patent assumes vital significance in patent law because of the nature of a patent specification as legal documents detailing intangible rights which protect commercially valuable products of the human intellect and labour. Though the law accords property status to patents, in that the rules of law applicable to the ownership and devolution of moveable property shall apply in relation to patents, the rights detailed in a patent specification, being intangible by nature, raise peculiar issues with regard to determination of the scope of the protection claimed.
- 6.2 Similar to the schedule to a landed property which marks and delimits its boundaries on all sides, the claims in a complete specification delimit the scope of the monopoly claimed by the invention. But unlike landed property, where the boundaries marked on the document can be measured and verified at the location where the property is situate, the intangible nature of patent rights imposes certain difficulties in determining the real boundary. The property status of patents accrues from two character-defining traits—the law which confers a trespassory claim against intrusions

¹ Patents Act 1970, s 50(5).

into its enjoyment and its capability to be assigned.² A trespass into the protected territory claimed by a patent is commonly referred to as an infringement of a patent. As Lord Russell had stated in *Electric and Musical Industries Ltd v Lissen Ltd*:³

The function of the claims is to define clearly and with precision the monopoly claimed, so that others may know the exact boundaries of the area within which they will be trespassers.

The need to demarcate the boundaries of protection is relevant not only for determining questions of infringement of a patent but also for ascertaining the validity of the patent, as reiterated by Lord Hoffmann in *Kirin-Amgen*:

The need to set clear limits upon the monopoly is not only, as Lord Russell emphasised, in the interests of others who need to know the area "within which they will be trespassers" but also in the interests of the patentee, who needs to be able to make it clear that he lays no claim to prior art or insufficiently enabled products or processes which would invalidate the patent.

6.3 The construction of a patent is the process by which the scope of the protection claimed by the patent is determined. The Patents Act confines the protection afforded to an invention to the scope of the claims defined by the inventor in the complete specification. By definition, patents are granted for inventions that are new and hitherto unknown. What should be the meaning given to the words chosen by the patentee to disclose information about his new and hitherto unknown invention? The need for detailed rules of construction arises from the fact that the meaning of words used by the patentee are not understood in accordance with what the patentee intends them to mean, but in accordance with what a person skilled in the art would have understood the patentee to mean. Elaborating on this unique feature of constructing documents from the perspective of a third-party, Lord Hoffmann said in *Kirin-Amgen*:

Construction, whether of a patent or any other document, is of course not directly concerned with what the author meant to say. There is

2 William Cornish, Intellectual Property Omnipresent, Distracting, Irrelevant? OUP, 2005, p 2.

no window into the mind of the patentee or the author of any other document. Construction is objective in the sense that it is concerned with what a reasonable person to whom the utterance was addressed would have understood the author to be using the words to mean. Notice, however, that it is not, as is sometimes said, "the meaning of the words the author used", but rather what the notional addressee would have understood the author to mean by using those words. The meaning of words is a matter of convention, governed by rules, which can be found in dictionaries and grammars. What the author would have been understood to mean by using those words is not simply a matter of rules. It is highly sensitive to the context of, and background to, the particular utterance. It depends not only upon the words the author has chosen but also upon the identity of the audience he is taken to have been addressing and the knowledge and assumptions which one attributes to that audience. I have discussed these questions at some length in Mannai Investment Co Ltd v Eagle Star Life Assurance Co Ltd [1997] AC 749 and Investors Compensation Scheme Ltd v West Bromwich Building Society [1998] 1 WLR 896.

Due to the special nature of patent specifications and the disclosure requirements required by law for its grant, courts have recognised the fact that the information in a specification could be new, pertaining to something that has not existed before and in some cases, devoid of a generally accepted definition.⁷

6.4 In response to this standard, patent law has developed rules of construction for determining the scope of claims in a complete specification. The definition of the scope is relevant to determine the rights of a patentee detailed in s 48 of the Patents Act. It is as much relevant in answering specific questions on novelty or obviousness of an invention. Determining patent infringement differs significantly from cases of infringement of other intellectual property rights. It comprises of a two-fold approach of first determining the scope of the protection claimed for the invention in the complete specification and then ascertaining whether the act of the alleged infringer fell within that scope.

(A) Provisions Under the Patents Act 1970

6.5 The following provisions of the Patents Act throw light on the manner in which a patent should be interpreted. The words 'invention' and 'patent' are defined in s 2(1)(j) and (m) of the Patents Act as follows:

³ See Electric and Musical Industries Ltd v Lissen Ltd [1938] 4 All ER 221, (1939) 56 RPC 23, per Lord Russell of Killowen.

⁴ Kirin-Amgen Inc v Hoechst Marion Roussel Ltd [2005] 1 All ER 667, (2005) RPC 9, para 21.

⁵ Patents Act 1970, s 10(4)(c).

⁶ Kirin-Amgen Inc v Hoechst Marion Roussel Ltd (2005) RPC 9, para 32.

⁷ Kirin-Amgen Inc v Hoechst Marion Roussel Ltd (2005) RPC 9, para 34.

 (j) 'invention' means a new product or process involving an inventive step and capable of industrial application;

(m) 'patent' means a patent for any invention granted under this Act;

Section 10 of the Patents Act deals with the contents of specifications, the relevant provision of which reads:

- (2) Subject to any rules that may be made in this behalf under this Act, drawings may, and shall, if the Controller so requires, be supplied for the purposes of any specification, whether complete or provisional; and any drawings so supplied shall, unless the Controller otherwise directs, be deemed to form part of the specification, and references in this Act to a specification shall be construed accordingly.
- (4) Every complete specification shall-

(a) fully and particularly describe the invention and its operation or use and the method by which it is to be performed;

(b) disclose the best method of performing the invention which is known to the applicant and for which he is entitled to claim protection; and

(c) end with a claim or claims defining the scope of the invention for which protection is claimed;

(d) be accompanied by an abstract to provide technical information on the invention:

(5) The claim or claims of a complete specification shall relate to a single invention, or to a group of inventions linked so as to form a single inventive concept, shall be clear and succinct and shall be fairly based on the matter disclosed in the specification.

The rights that accrue to a patentee are detailed in s 48 of the Patents Act which reads:

- 48. Rights of patentees.—Subject to the other provisions contained in this Act and the conditions specified in section 47, a patent granted under this Act shall confer upon the patentee-
 - (a) where the subject matter of the patent is a product, the exclusive right to prevent third parties, who do not have his consent, from the act of making, using, offering for sale, selling or importing for those purposes that product in India;

(b) where the subject matter of the patent is a process, the exclusive right to prevent third parties, who do not have his consent, from the act of using that process, and from the act of using, offering for sale, selling or importing for those purposes the product obtained directly by that process in India.

The Patents Act also requires the scope of a claim to be definite and s 64(1)(i) of the Patents Act provides for the revocation of a patent on the ground: '(i) that the scope of any claim of the complete specification is not sufficiently or clearly defined'.

(B) Comparative Provisions

6.6 Though the rules of construction of patents were exclusively developed by judicial decisions in United Kingdom under the UK Patents Act 1949, the introduction of s 125 of the UK Patents Act 1977 has codified the principles relating to construction. The relevant provisions of s 125, which corresponds to art 69 of the EPC, reads:

125. Extent of invention.—

(1) For the purposes of this Act an invention for a patent for which an application has been made or for which a patent has been granted shall, unless the context otherwise requires, be taken to be that specified in a claim of the specification of the application or patent, as the case may be, as interpreted by the description and any drawings contained in that specification, and the extent of the protection conferred by a patent or application for a patent shall be determined accordingly.

(3) The Protocol on the Interpretation of Article 69 of the European Patent Convention (which Article contains a provision corresponding to subsection (1) above) shall, as for the time being in force, apply for the purposes of subsection (1) above as it applies for the purposes of that Article.

Article 69 of the EPC provides:

Extent of protection

(1) The extent of the protection conferred by a European patent or a European patent application shall be determined by the terms of the claims. Nevertheless, the description and drawings shall be used to interpret the claims.

(2) For the period up to grant of the European patent, the extent of the protection conferred by the European patent application shall be determined by the latest filed claims contained in the publication under Article 93. However, the European patent as granted or as amended in opposition proceedings shall determine retroactively the protection conferred by the European patent application, in so far as such protection is not thereby extended.

The Protocol on the Interpretation of art 69 of the EPC ('Protocol'), which is equally applicable for interpreting s 125 of the UK Patents Act 1977, in turn provides:⁸

Article 69 should not be interpreted in the sense that the extent of the protection conferred by a European patent is to be understood as that defined by the strict, literal meaning of the wording used in the claims, the description and drawings being employed only for the purpose of resolving an ambiguity found in the claims. Neither should it be interpreted in the sense that the claims serve only as a guideline and that the actual protection conferred may extend to what, from a consideration of the description and drawings by a person skilled in the art, the patentee has contemplated. On the contrary, it is to be interpreted as defining a position between these extremes which combines a fair protection for the patentee with a reasonable degree of certainty for third parties.

GENERAL PRINCIPLES OF CONSTRUCTION

6.7 Patents should be interpreted purposefully, balancing the fair protection for the patentee with a reasonable degree of certainty for third parties. The canons of construction offer guidance in interpreting a patent and an over-rigid application of any of them may not be appropriate. The

general principles applicable for the construction of patents have been comprehensively discussed in *Glaverbel SA v British Coal Corpn*, a decision granted under the UK Patents Act 1949, where Staughton LJ summarised the following principles:¹⁰

- (1) The interpretation of a patent, as of any other written document, is a question of law. That does not mean that the answer to it will necessarily be found in our law books. It means that it is for the judge rather than a jury to decide, and that evidence of what the patent means is not admissible. In particular, evidence of the patentee as to what he intended it to mean should not be admitted, nor indirect evidence which is said to point to his intention. Compare the rule that the parties to a deed or contract cannot give evidence of what they intended it to mean. A patent is construed objectively, through the eyes of a skilled addressee.
- (2) The court may, and indeed should, have regard to the surrounding circumstances as they existed at the date of the publication of the specification (or perhaps the priority date). Those circumstances, sometimes described as 'the matrix' in a commercial context, would include common general knowledge. I imagine that they would not include circumstances known only to the patentee or a limited class of persons, since every skilled addressee should be able to know what the patent means and therefore have equal access to material available for interpretation.
- (3) The court should admit evidence of the meaning of technical terms. It may be that expert evidence can go somewhat further than that in aid of interpretation; but I need not decide that in the present case.
- (4) The whole document must be read together, the body of the specification with the claims. But if a claim is expressed in clear language, the monopoly sought by the patentee cannot be extended or cut down by reference to the rest of the specification.
- (5) The court must adopt: "a purposive construction rather than a purely literal one derived from applying to it the kind of meticulous verbal analysis in which lawyers are too often tempted by their training

⁸ See 'Protocol on the Interpretation of Article 69 of the Convention', adopted at the Munich Diplomatic Conference for the setting up of a European System for the Grant of Patents on 5 October 1973. As per art 164(1) of the EPC, the Protocol shall be an integral part of EPC.

⁹ Brugger v Medic-Aid Ltd (1996) RPC 635, pp 641-42.

^{10 (1995)} RPC 255, pp 268-270, [1995] FSR 254, pp 263-265. See also Osram Lamp Works Ltd v Pope's Electric Light Co Ltd (1917) 34 RPC 369; British Celanese Ltd v Courtaulds Ltd (1935) 52 RPC 171 (HL); Electrical & Musical Industries Ltd v Lissen Ltd (1938) 56 RPC 23; General Tire & Rubber Co v The Firestone Tyre and Rubber Co Ltd (1972) RPC 457; Strix Ltd v Otter Controls Ltd [1991] FSR 354.

to indulge" Catnic Components Ltd v Hill & Smith Ltd [1982] RPC 183 by Lord Diplock, p 243.

This has become a popular theme in recent times, for the interpretation of contracts and statutes. But what does it mean? There is a clear contrast with meticulous verbal analysis, or the "narrowly semantic approach" (also described by Lord Diplock, in *Fothergill v Monarch Airlines Ltd* [1981] AC 251 at p 280). If possible, the meaning of the document must be moulded to conform with the purpose of its author or authors—the purpose being judged from the document as a whole and the surrounding circumstances.

To put it another way, there is a conflict with the purpose if a judge is disposed to say to himself—"he cannot have meant that". In the *Catnic* case itself, Lord Diplock said (at p 244): "No plausible reason has been advanced why any rational patentee should want to place so narrow a limitation on his invention. On the contrary, to do so would render his monopoly for practical purposes worthless…"

That is in my view an example of the purposive method of construction. It is at least allied to, and perhaps an example of, what Lord Reid said in *L Schuler AG v Wickman Machine Tool Sales Ltd* (1974) AC 235, 251: "The fact that a particular construction leads to a very unreasonable result must be a relevant consideration. The more unreasonable the result the more unlikely it is that the parties can have intended it, and if they do intend it the more necessary it is that they should make their intention abundantly clear."

- (6) Subsequent conduct is not available as an aid to interpretation of a written document. That too was established by the *Schuler* case, reaffirming an earlier decision of the House of Lords.
- (7) A claim must not be construed with an eye on prior material, in order to avoid its effect: *Molins Ltd v Industrial Machinery Co Ltd* (1938) 55 RPC 31, 39.

The seven broad headings summarised above are discussed here in detail followed by other general principles of construction that the courts have evolved and developed in constructing patents.

(A) Interpretation of a Patent is a Question of Law

6.8 A patent specification contains both technical as well as legal information about an invention. While the technical aspects 'describe' the

invention, the legal aspects 'demarcate' the invention. ¹¹ The construction of patents involves a unique situation where the language of science is tested by the language of law. It entails an exercise of giving meaning to the words used by the patentee judged from the standard of a person skilled in the art. As a legal document, it contains a unilateral expression of intention of the inventor. Courts have reiterated the legal nature of a patent specification by stipulating that it should be constructed like any other legal document, in accordance with the recognised cannons of construction, ¹² and not by their strict literal meaning. ¹³ Despite their special nature, patents are predominantly legal documents ¹⁴ and its construction is for the court alone. ¹⁵

(i) Construction is for the Court

6.9 The construction of a specification is a matter of law and it is for the court to construct the same. The court should interpret the specification from the standpoint of a person skilled in the art having regard to the nature of the invention, to the nature and size of the industry concerned, the way it is organised for the purposes of conducting research into, and of producing and marketing, its products. It is well settled that evidence is only admissible for the purpose of explaining words or symbols of art, other technical matters and for informing the court of relevant surrounding circumstances. Such evidence may be given by an expert to explain the working of the invention or to point out the state of the art at the time of the specification among those to whom the teaching in the specification is addressed. The issues with regard to which the court may admit expert evidence are detailed in *British Celanese Ltd v Courtaulds Ltd*, where Lord Tomlin said: On the said:

¹¹ See Kirin-Amgen Inc v Hoechst Marion Roussel Ltd (2005) RPC 9, [2005] 1 All ER 667, para 33.

¹² See Electric and Musical Industries Ltd v Lissen Ltd [1938] 4 All ER 221, p 224, (1939) 56 RPC 23, p 39 (HL), per Lord Russell of Killowen.

¹³ Catnic Components Ltd v Hill & Smith Ltd (1982) RPC 183, p 243, [1981] FSR 60 (HL) per Lord Diplock.

¹⁴ Kirin-Amgen Inc v Hoechst Marion Roussel Ltd (2005) RPC 9, [2005] 1 All ER 667, paras 27-32.

¹⁵ Lubrizol Corpn v Esso Petroleum Co Ltd (1998) RPC 727, p 738.

¹⁶ See Lallubhai Chakubhai Jariwala v Chimanlal Chunilal & Co AIR 1936 Bom 99, p 105, (1935) 37 Bom 1.R 665.

¹⁷ American Cyanamid Co v Ethicon Ltd (1979) RPC 215, pp 245-46 (Ch D).

¹⁸ Canadian General Electric Co Ltd v Fada Radio Ltd AIR 1930 PC 1, [1930] AC 97, p 104, (1930) 47 RPC 69.

¹⁹ Glaverbel SA v British Coal Corpn (No 2) (1993) RPC 90, pp 93-94.

^{20 (1935) 52} RPC 171, p 195. See also Scanvaegt International A/s v Pelcombe Ltd [1998] FSR 786, pp 795-96 (CA).

The area of the territory in which in cases of this kind an expert witness may legitimately move is not doubtful. He is entitled to give evidence as to the state of the art at any given time. He is entitled to explain the meaning of any technical terms used in the art. He is entitled to say whether in his opinion that which is described in the specification on a given hypothesis as to its meaning is capable of being carried into effect by a skilled worker. He is entitled to say what, at a given time, to him, as skilled in the art, a given piece of apparatus or a given sentence on any given hypothesis as to its meaning, would have taught or suggested to him. He is entitled to say whether in his opinion a particular operation in connection with the art could be carried out and generally to give any explanation required as to facts of a scientific kind.

But no expert evidence shall be given with regard to the following matters:²¹

He is not entitled to say nor is Counsel entitled to ask him what the specification means, nor does the question become any more admissible if it takes the form of asking him what it means to him as an engineer or as a chemist. Nor is he entitled to say whether any given step or alteration is obvious, that being a question for the Court.

In any case, the court has the final say with regard to what evidence may be accepted and is not obliged to accept the construction placed on the words by either of the parties. ²²

(a) Relevant Surrounding Circumstances

6.10 In constructing patents, the court may admit extrinsic evidence of relevant circumstances surrounding the preparation of the specification.²³ The relevant surrounding circumstances will include the 'common general knowledge' about a particular subject.²⁴ Proof of the relevant surrounding circumstances is given by expert witnesses. The limits with regard to admissibility of such evidence is summarised by Mummery J in *Glaverbel SA v British Coal Corpn (No 2)*:²⁵

There are, however, clear limits to the evidence which the court will admit in aid of construction of a patent specification or of any other document. The meaning of the specification must be ascertained from the particular language in which it is expressed, as seen in its objective factual setting. Consistently with this approach, the courts have refused to admit the following evidence either to enlarge or restrict the ordinary meaning of the language of the specification.

(a) Direct evidence of the subjective intentions, thoughts and opinions of the inventor and his professional advisers and agents. Even pre-existing documentary evidence of those intentions and opinions, such as might be found in the Patent Office file (see Bowden Brake Co Ltd v Bowden Wire Ltd, (1913) 30 RPC 561) or in correspondence passing between the inventor's patent agent and the Comptroller-General (see Poseidon Industri AB v Cerosa Ltd, [1975] FSR 122 at 123), or in documents relating to applications for corresponding foreign patents (see Schering Agrochemicals Ltd v ABM Chemicals Ltd, [1987] RPC 185), is not regarded as relevant for the purpose of discovery of documents or as admissible for the construction of the specification.

The reason for excluding that evidence is the same as the reason for excluding evidence of prior negotiations leading to a contract, which is not admissible to construe a contract (see *Prenn v Simmonds*²⁶). Such evidence is not regarded by the court as helpful or relevant in ascertaining the meaning of the language in which the inventor and his advisers have described the invention.

- (b) A fortiori, the courts will not admit for the purposes of construction evidence of conduct subsequent to the document to show how the document was in fact acted upon and understood. In certain circumstances such evidence may be used to raise an estoppel, establish a variation or found a claim for rectification. But in the context of the disputed construction of a document, such as a specification, that evidence has no probative value. The question is what the document meant as at the time when it was made. That meaning cannot, as a matter of construction, be altered or ascertained by evidence of how the parties subsequently acted upon it or interpreted it. See the decision of the House of Lords in Schuler AG v Wickman Machine Tool Sales Ltd., [1974] AC 235 (see in particular passages at pages 252, 260, 261, 262, 263, 265 and 272 to 273).
- (c) The opinion of expert witnesses on the construction of the specification (or of any other document) will not be admitted by the

²¹ Scanvaegt International A/s v Pelcombe Ltd [1998] FSR 786, p 796.

²² Consafe Engineering (UK) Ltd v Emtunga UK Ltd (1999) RPC 154, p 163.

²³ Glaverbel SA v British Coal Corpn (No 2) (1993) RPC 90, p 93.

²⁴ For 'common general knowledge', see para 6.22 onwards.

^{25 (1993)} RPC 90, pp 93-95. This approach was accepted by the Court of Appeal in (1995) RPC 255.

^{26 [1971] 3} All ER 237, [1971] 1 WLR 1381.

court. The position was stated as clearly as it can be by Lord Tomlin in the *British Celanese case*²⁷ at page 196 in these terms: "He [that is, an expert witness] is not entitled to say nor is Counsel entitled to ask him what the specification means, nor does the question become any more admissible if it takes the form of asking him what it means to him as an engineer or as a chemist."

The cases constantly emphasise that it is for the court, and not for an expert witness, to construe the specification and the ambit of the claims made in it.

(ii) Principles Similar to Interpretation of Contracts

6.11 Like any other written instrument, the patent will be construed as a whole. The principles for the interpretation of patents are similar to that developed for interpretation of contracts. The construction of documents is a question of law that does not change from case to case. The courts may rely on earlier judicial construction of a patent. The canons of construction are used more as general guidelines than rules of law to construe a contract in a way to make it valid and give effect to all its parts. The same approach will apply to the construction of patents. In certain circumstances, similar to filling the gaps in a contract by the process of interpretation, the court may fill a gap or depart from the precise terms of the patent, if the court is satisfied that the same can be done as a matter of interpretation.

(iii) Common Principles for Validity and Infringement

6.12 The principles applied in the construction of patents are the same in determining cases of revocation (invalidity) and infringement.³³ The extent of protection offered by the patent is important for both proceedings.³⁴ Of

course, it would have been desirable, had it been permissible, from the view point of a patentee, to interpret the scope of the patent broadly in cases of infringement and narrow down its scope where the validity of the patent is questioned in revocation proceedings. Such liberties are not available to the patentee. The scope and ambit of a patent claim must be construed without reference to the prior art; it must be the same regardless of the case pleaded against the patent. As issues of validity and infringement are likely to arise in the same proceedings, the standards of construction must necessarily be the same in revocation and infringement proceedings.

6.13 It will not be permissible to construe a claim by reference to an alleged infringement. 38 Just as how a claim should be constructed without reference to the prior art, the claim should also be constructed without reference to the alleged infringement. This would be helpful to ascertain the scope of the invention as it would have been on the date of publication of specification without knowledge of the alleged infringement, which would have happened on a later date. It would not be proper to use an alleged infringing product or process which would have come into existence after the priority date of patent, as a means of interpreting a patent. 39

6.14 The construction of a patent will inevitably involve questions of fact as well as law. Though a claim ought to be construed without reference to the alleged acts of infringement, the courts are likely to have knowledge of the infringement before constructing the claims. Though a patent is to be construed without reference to the alleged infringement, the questions of construction may be considered in the context in which they arise. Thus, the proper approach would be to construe the patent and its claims without looking at the infringement and only after this has been done, to see whether there is any infringement on the facts of the case.

^{27 (1935) 52} RPC 171.

²⁸ See Electric and Musical Industries Ltd v Lissen Ltd [1938] 4 All ER 221, p 224, (1939) 56 RPC 23, p 39 (HL), per Lord Russell of Killowen.

²⁹ Ultraframe (UK) Ltd v Eurocell Building Plastics Ltd (2005) RPC 7, para 68, per Lewison I.

³⁰ SmithKline Beecham Plc v Apotex Europe [2004] FSR 26, para 12.

³¹ See Lewison, *The Interpretation of Contracts*, ch 6, 'The Cannons of Construction', second edn, 1997.

³² Pharmacia Corpn v Merck & Co Inc (2002) RPC 41, para 160.

³³ See Van der Lely NV v Ruston's Engineering Co Ltd (1985) RPC 461, p 487 (CA), per May LJ, followed in Conoco Speciality Products (Inc) v Merpro Montassa Ltd [1992] SLT 444, [1994] FSR 99.

³⁴ Wheatley (Davina) v Drillsafe Ltd (2001) RPC 7, para 18.

³⁵ See para 6.47.

³⁶ Kastner v Rizla Ltd (1995) RPC 585, p 595 (CA).

³⁷ See Beloit Technologies Inc v Valmet Paper Machinery Inc (1995) RPC 705, p 720, where the court detailed the practical difficulties faced by some European countries which tried the issues of validity and infringement of patents in different courts.

³⁸ Codex Corpn v Racal-Milgo Ltd (1983) RPC 369, p 381 (CA), where it was held that there was 'no suggestion in Lord Diplock's speech (in the Catnic case) that one should look only to the essence or principle of a patent in suit and hold there to have been an infringement merely because that essence or principle has been made use of by the alleged infringer'. See also Willemijn Houdstermaatschappij BV v Madge Networks Ltd (1992) RPC 386, p 399 (CA).

³⁹ See Ultraframe v Eurocell Building Plastics [2005] EWCA Civ 761, para 76, per Neuberger LJ (dissenting judgment).

⁴⁰ Lux Traffic Controls Ltd v Pike Signals Ltd (1993) RPC 107, p 126. Technip France SA' Patent (2004) RPC 46, para 41 (CA).

⁴¹ Merck & Co Inc v Generics (UK) Ltd (2004) RPC 31, para 23.

(iv) Relevant Date for Construing a Specification

6.15 The courts have deliberated, with differing opinions, on what should be the relevant date for construing a specification. The relevant date for determining insufficiency has been held to be the date of filing the application, the date of acceptance of specification, the date of filing of complete specification and the date of publication. 42 Generally, a specification is construed with reference to the state of the art at the time it is published. 43 The Court of Appeal has held that under the UK Patents Act 1977, a 'patent specification must be construed as at the date of its publication'. 44 This is in variance with some decisions where it has been observed that the patent should be construed with regard to its priority date. 45 There appears to be a practice of attributing different dates for different purposes. In fact, in Biogen Inc v Medeva Plc, 46 the House of Lords held that the relevant date for assessing sufficiency under s 72(1)(c) of the UK Patents Act (for the purpose of determining validity of a patent) is the date of application and not the date of publication of specification.

6.16 When the principles of interpretation of patent applied are the same for determining invalidity (revocation)⁴⁷ and infringement, the variance in the manner of ascertaining the relevant date with regard to the construction of a specification creates difficulties. The differing perspectives appear to be the result of differing standards in determining the state of the art for the purposes of novelty, obviousness and sufficiency. It is submitted that it would be anomalous to regard the date of publication as the date at which the state of common general knowledge has to be assessed for the purposes of construction, since obviousness has to be assessed in the light of common

general knowledge at the priority date. It would also be anomalous to separate the date at which sufficiency has to be assessed from the date at which the specification has to be construed.⁴⁸

(B) Patents are Intended to be Read by Persons Skilled in the Art

6.17 The phrase 'person skilled in the art' is not defined under the Patents Act, though it is mentioned in s 2(1)(ja) in the context of determining obviousness. The person skilled in the art is also known as a notional skilled addressee to whom the patent is deemed to have been addressed. As a hypothetical construct, the addressee is taken to be an unimaginative person who lacks inventive capacity but at the same time is deemed to have common general knowledge of the subject matter of the invention. A patent is supposed to teach people how to perform the invention. If necessary information is not present in the patent, then the skilled person must be given a clear unambiguous direction on where to get it. He cannot be expected to find such a direction buried in acknowledgements of the prior art. 49

(i) Determining the Person Skilled in the Art

6.18 In determining the person skilled in the art, 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 task of the court is detailed in Lubrizol Corpn v Esso Petroleum Co Ltd: 51

Patent specifications are intended to be read by persons skilled in the relevant art, but their construction is for the Court. Thus the court must adopt the mantle of the notional skilled addressee and determine, from the language used, what the notional skilled addressee would understand to be the ambit of the claim. To do that it is often necessary for the Court to be informed as to the meaning of technical words and phrases and what was, at the relevant time, the common general knowledge; the knowledge that the notional skilled man would have.

⁴² See Standard Brands Inc's Patent (No 2) (1981) RPC 499, pp 529-31 (CA). See also Osram Lamp Works Ltd v Popes Electric Lamp Co Ltd (1917) 34 RPC 369; Anxionnaz v Rolls Royce Ltd (1967) RPC 419; American Cyanamid Co (Dann's) Patent (1970) RPC 306, p 329; Illinois Tool Works Inc v Autobars Co (Services) Ltd (1974) RPC 337.

⁴³ See Lane-Fox v Kensington and Knightsbridge Electric Lighting Co Ltd (1892) 9 RPC 413, p 417, [1892] 3 Ch 424, pp 427-28. See also Standard Brands Inc's Patent (No 2) (1981) RPC 499, p 529 (CA).

⁴⁴ Willemijn Houdstermaatschappij BV v Madge Networks (1992) RPC 386, p 388.

⁴⁵ See Helitune Ltd v Stewart Hughes Ltd (1991) RPC 78, [1991] FSR 171, p 206 where Aldous J observed: 'I believe that the correct approach is to look first to see what are the acts of the defendant which are alleged to be infringements and which it wishes to continue. Thereafter I must decide whether it carried out those acts in good faith before the priority date or whether it made effective and serious preparations to do so.' See also Glaverbel SA v British Coal Corpn (1995) RPC 255, p 284, [1995] FSR 254.

^{46 (1997)} RPC 1, p 54.

⁴⁷ See para 15.5 for the relation between revocation and invalidity under the Patents Act 1970.

⁴⁸ See Sundstrand Corpn v Safe Flight Instrument Corpn [1994] FSR 599, p 607, following Willemijn Houdstermaatschappij BV v Madge Networks (1992) RPC 386.

⁴⁹ Halliburton Energy Services Inc v Smith International (North Sea) Ltd [2006] EWCA Civ 1715, para 67 (CA).

⁵⁰ Windsurfing International Inc v Tabur Marine (Great Britain) Ltd (1985) RPC 59, pp 73-74, per Oliver LJ.

^{51 (1998)} RPC 727, p 738.

6.19 The notional skilled addressee will vary with the facts and circumstances of each case, depending on the subject matter of the invention. The subject matter will be crucial in determining the addressee of the patent. The addressee will be expected to have 'a practical interest in the subject matter' of the invention having 'practical knowledge and experience of the kind of work in which the invention is intended to be used'. 52 His interest in the subject will enable him to read a document assiduously, regardless of how immensely boring it is. 53 In certain cases, the skilled person will be required to exercise a high degree of skill in meticulous and detailed operations that may be time-consuming. 54

6.20 The subject matter will also determine whether the addressee is an individual person or a composite entity.⁵⁵ In cases involving advanced technology, it could be a team of members having different technical skills and knowledge,⁵⁶ regardless of whether the members of the team worked as a single unit or individually.⁵⁷ The addressee may be assumed to know the basic principles of patentability.⁵⁸

6.21 The court will allow expert evidence in determining what the skilled addressee knew. The court shall construe the specification and its claims in the light of the common general knowledge of such an addressee.⁵⁹ The

court will have to construct patents objectively as 'a reasonable person to whom the utterance was addressed would have understood the author to be using the words to mean'. 60 The notional skilled addressee should be the same entity for the purposes of determining obviousness and sufficiency of an invention. 61

(ii) Common General Knowledge

6.22 Common general knowledge is a part of the mental requirement of a person skilled in the art. It is the mental tools of the trade of a person skilled in the art. 62 It is the technical background of the notional man in the art against which the prior art must be considered. 63 The proof of common knowledge is given by expert witnesses. 64 In construing patents, the court will have to put itself in the position of a skilled addressee at the time the specification was published and look at the patent from the standards of the common general knowledge of such person. Common general knowledge refers to the 'common knowledge in art and science to which the alleged invention relates, so as to be known to duly qualified persons engaged in that art or science'. 65 It is not limited to the material the person skilled in the art has memorised and has at the front of his mind. It also includes 'all that material in the field he is working in, which he knows exists, which he would refer to as a matter of course if he cannot remember it, and which he understands is generally regarded as sufficiently reliable to use as a foundation for further work or to help understand the pleaded prior art'.66

6.23 The knowledge should be of a general nature. It will not suffice to show that a matter was known to some but not to others, and in particular, it will not be good enough to show that knowledge, or even a prejudice 'was confined to one or a limited class of suggested exemplars of the skilled man'. A concept that is well-known to some will not be a part of the

⁵² Catnic Components Ltd v Hill & Smith Ltd (1982) RPC 183, p 242.

⁵³ Technip France SA's Patent (2004) RPC 46, para 79 (CA).

⁵⁴ See Genentech Inc's (Human Growth Hormone) Patent (1989) RPC 613, p 619.

^{55 &#}x27;If the art is one having a highly developed technology, the notional skilled reader to whom the document is addressed may not be a single person but a team, whose combined skills would normally be employed in that art in interpreting and carrying into effect instructions such as those which are contained in the document to be construed.' See *General Tire & Rubber Co v The Firestone Tyre and Rubber Co Ltd* (1972) RPC 457, p 482, [1971] FSR 417, p 443.

^{56 &#}x27;I am satisfied that the notional skilled addressee of the specification of the patent in suit must be taken to be a team including microbiologists experienced in such recombinant DNA techniques as those involved in gene cloning and probably, though not necessarily, a chemist or chemists skilled in the synthesis of biochemical compounds.' See Genentech Inc's (Human Growth Hormone) Patent (1989) RPC 613, p 619, per Falconer J. See also Optical Coating Laboratory v Pilkington (1995) RPC 145, p 156.

^{57 &#}x27;In the modern world of science such as the sphere in which teams of highly qualified molecular biochemists, protein sequencers, protein chemists and others work, the artisan has receded into the role of laboratory assistant and the others have become segregated into groups of highly qualified specialists in their own spheres, all of whom must possess a high degree of inventiveness. If this were not so the specialists would not have been there at all.' See *Genentech Inc's Patent* (1989) RPC 147, p 214 (CA).

⁵⁸ Kirin-Amgen Inc v Hoechst Marion Roussel Ltd [2005] 1 All ER 667, (2005) RPC 9, para 78, per Lord Hoffmann.

⁵⁹ Hoechst Celanese Corpn v BP Chemicals Ltd [1999] FSR 319, pp 325-326 (CA).

⁶⁰ Kirin-Amgen Inc v Hoechst Marion Roussel Ltd (2005) RPC 9, [2005] 1 All ER 667, para 32.

⁶¹ Halliburton Energy Services Inc v Smith International (North Sea) Ltd [2006] EWCA Civ 1715, para 22 (CA).

⁶² SmithKline Beecham Plc v Apotex Europe [2005] FSR 23, para 96.

⁶³ Raychem Corpn's Patent (1998) RPC 31, p 40.

⁶⁴ See British Celanese Ltd v Courtaulds Ltd (1933) 50 RPC 63, p 90; Bühler AG v Satake UK Ltd (1997) RPC 232, p 236.

⁶⁵ British Thomson-Houston Co Ltd v Stonebridge Electrical Co Ltd (1916) 33 RPC 166, p 171.

⁶⁶ Raychem Corpn's Patent (1998) RPC 31, p 40.

⁶⁷ Union Carbide Corpn v BP Chemicals Ltd (1998) RPC 1, p 16.

common general knowledge if it was not known to the bulk of those skilled in the art.⁶⁸ The person skilled in the art cannot be expected to find such knowledge 'buried in acknowledgements of the prior art'.⁶⁹ In other words:⁷⁰

This does not mean that everything on the shelf which is capable of being referred to without difficulty is common general knowledge nor does it mean that every word in a common text book is either. In the case of standard textbooks, it is likely that all or most of the main text will be common general knowledge. In many cases common general knowledge will include or be reflected in readily available trade literature which a man in the art would be expected to have at his elbow and regard as basic reliable information.

6.24 Common general knowledge must be distinguished from public knowledge as observed in *General Tire & Rubber Co v The Firestone Tyre and Rubber Co Ltd*, by Sachs LJ:⁷¹

The common general knowledge imputed to such an addressee must, of course, be carefully distinguished from what in patent law is regarded as public knowledge. This distinction is well explained in Halsbury's Laws of England, vol 29, para 63. As regards patent specifications it is the somewhat artificial (see per Lord Reid in the Technograph case [1971] FSR 188 at 193) concept of patent law that each and every specification, of the last 50 years, however unlikely to be looked at and in whatever language written, is part of the relevant public knowledge if it is resting anywhere in the shelves of the Patent Office. On the other hand, common general knowledge is a different concept derived from a commonsense approach to the practical question of what would in fact be known to an appropriately skilled addressee—the sort of man, good at his job, that could be found in real life.

6.25 The difficulty in demarcating the realm of common knowledge and that of specialised knowledge is discussed in *Beloit Technologies Inc v Valmet Paper Machinery Inc*, where Aldous LJ, observed:⁷²

68 Beloit Technologies Inc v Valmet Paper Machinery Inc (1997) RPC 489.

It has never been easy to differentiate between common general knowledge and that which is known by some. It has become particularly difficult with the modern ability to circulate and retrieve information. Employees of some companies, with the use of libraries and patent departments, will become aware of information soon after it is published in a whole variety of documents; whereas others, without such advantages, may never do so until that information is accepted generally and put into practice. The notional skilled addressee is the ordinary man who may not have the advantages that some employees of large companies may have. The information in a patent specification is addressed to such a man and must contain sufficient details for him to understand and apply the invention. It will only lack an inventive step if it is obvious to such a man.

It follows that evidence that a fact is known or even well-known to a witness does not establish that that fact forms part of the common general knowledge. Neither does it follow that it will form part of the common general knowledge if it is recorded in a document. As stated by the Court of Appeal in *General Tire & Rubber Co v Firestone Tyre & Rubber Co Ltd* [1972] RPC 457, at page 482, line 33:

"The two classes of documents which call for consideration in relation to *common general* knowledge in the instant case were individual patent specifications and 'widely read publications'.

As to the former, it is clear that individual patent specifications and their contents do not normally form part of the relevant *common general* knowledge, though there may be specifications which are so well known amongst those versed in the art that upon evidence of that state of affairs they form part of such knowledge, and also there may occasionally be particular industries (such as that of colour photography) in which the evidence may show that all specifications form part of the relevant knowledge.

As regards scientific papers generally, it was said by Luxmoore, J in British Acoustic Films (53 RPC 221 at 250):

"In my judgment it is not sufficient to prove common general knowledge that a particular disclosure is made in an article, or series of articles, in a scientific journal, no matter how wide the circulation of that journal may be, in the absence of any evidence that the disclosure is accepted generally by those who are engaged in the art to which the disclosure relates. A piece of particular knowledge as disclosed in a scientific paper does not become common general

⁶⁹ Halliburton Energy Services Inc v Smith International (North Sea) Ltd [2006] EWCA Civ 1715, para 67 (CA).

⁷⁰ Raychem Corpn's Patent (1998) RPC 31, p 40, per Laddie J.

^{71 [1971]} FSR 417, p 439.

^{72 (1997)} RPC 489, p 494 (CA).

knowledge merely because it is widely read, and still less because it is widely circulated. Such a piece of knowledge only becomes general knowledge when it is generally known and accepted without question by the bulk of those who are engaged in the particular art; in other words, when it becomes part of their common stock of knowledge relating to the art."

And a little later, distinguishing between what has been written and what has been used, he said:

"It is certainly difficult to appreciate how the use of something which has in fact never been used in a particular art can ever be held to be common general knowledge in the art."

Those passages have often been quoted, and there has not been cited to us any case in which they have been criticised. We accept them as correctly stating in general the law on this point, though reserving for further consideration whether the words 'accepted without question' may not be putting the position rather high: for the purposes of this case we are disposed, without wishing to put forward any full definition, to substitute the words 'generally regarded as a good basis for further action'."

Knowledge of regulatory requirements will not be imputed to be a part of the common general knowledge for the purpose of determining obviousness.⁷³

(C) Interpretation of a Patent May Require Expert Evidence on Technical Terms

(i) Expert Witnesses

6.26 Common general knowledge or general public knowledge must be proved by witnesses in a general way and if necessary, there can be references to well-known works as to the state of general public knowledge at the relevant time. Usually, the expert witnesses who give evidence in patent cases tend to be over-skilled and have been referred to as 'persons steeped in the art'. The eminence and technical qualification of the expert witness summoned by the parties can be a critical factor. The court is likely to go by the testimony of the expert whose field of expertise is directly in line

73 Ivax Pharmaceuticals UK Ltd v Akzo Nobel NV [2006] EWHC 1089 (CH).

with that of a person skilled in the art.⁷⁶ As the primary duty of the expert is to educate the court in the technology, it will not really matter whether such witnesses did or did not approximate to the person skilled in the art.⁷⁷ The court will not be bound to follow the opinion of the expert.⁷⁸

(ii) Evidence on Technical Terms

6.27 The context of the words used in the claims may be understood from its usage in the body of the specification, by reading the specification as a whole.⁷⁹ The court may require evidence on the technical expressions used in the claims and specification, if it feels that any such expressions require an explanation.⁸⁰ Where the words used in the claims are not technical words having a special trade meaning, the opinion of expert witnesses on the meaning of such words will not be admissible.⁸¹ It will be for the court to decipher and construe the meaning of such words. The court is entitled to admit evidence on the meaning of technical terms, and must decide the meaning of these terms from the context in which they are used.⁸²

(a) Aids of Construction

6.28 As the purposive interpretation involves construing the claims in context, the literal meaning of technical terms offered in dictionaries may only be of marginal relevance to the construction of a patent claim. ⁸³ Dictionaries offer meaning of words which are devoid of any context. It is

⁷⁴ Holliday v Heppenstall Brothers (1889) 41 Ch D 109, p 114, (1889) 6 RPC 320, per Cotton LJ (CA).

⁷⁵ Terrell on the Law of Patents, fifteenth edn, 2000, p 125.

⁷⁶ See Ranbaxy UK Ltd v Warner-Lambert Co [2006] FSR 14. In this case an attempt was made, more by way of submission than on the basis of any evidence, to suggest that the perspective of a medicinal chemist (expert witness of Warner-Lambert) and of a synthetic organic chemist (expert witness of Ranbaxy) on the disclosure of the '633 patent would be different. The court, however, considered the difference to be more a matter of personality than of substance.

⁷⁷ Technip France SA's Patent (2004) RPC 46, paras 11-12 (CA).

⁷⁸ Ibid, paras 13-15.

⁷⁹ See Lallubhai Chakubhai Jariwala v Chimanlal Chunilal & Co AIR 1936 Bom 99, p 105, (1935) 37 Bom LR 665. See also Rosedale Associated Manufacturers Ltd v Carlton Tyre Saving Co Ltd (1960) RPC 59, p 69 (CA) followed in Insituform Technical Services Ltd v Inliner UK plc (1992) RPC 83, p 90 and Rediffusion Simulation Ltd v Link-Miles Ltd [1993] FSR 369, p 385.

⁸⁰ Brugger v Medic-Aid Ltd (1996) RPC 635, p 642. See American Cyanamid Co v Ethicon Ltd (1979) RPC 215, p 249.

⁸¹ Societe Technique de Pulverisation STEP v Emson Europe Ltd (1993) RPC 513, p 522 (CA).

⁸² Hoechst Celanese Corpn v BP Chemicals Ltd [1999] FSR 319, pp 326-27.

⁸³ Minnesota Mining & Manufacturing Co v Plastus Kreativ AB (1997) RPC 737, p 744.

now recognised that a word or a phrase used by the patentee may have a particular meaning (narrow or wide) when viewed acontextually, but it need not necessarily have such a meaning when viewed in context. ⁸⁴ For instance in *Catnic*, the phrase 'extending vertically' was interpreted in context to mean 'positioned near enough to the exact geometrical vertical to enable it in actual use to perform satisfactorily all the functions that it could perform if it were precisely vertical'. ⁸⁵ In other cases, the word 'centre' was interpreted to mean 'physical centre' and the word 'conduit' was interpreted as a word expressing a function and as excluding the defendants' device in which 'the bottom of the pump chamber is formed by a sealing ring in the bottom of the chamber'. ⁸⁷

(D) Patent Specification and the Claims Should be Read as a Whole

6.29 Like any other legal document, a patent should be construed as a whole, ie, the title, claims and drawings should be read together as a single document. The claims in a specification are analogous to the operative part of a deed. It follows that the claims must be interpreted as a part of the whole document. The claim and the specification should be looked at and construed together expecting one to be consistent with the other. This principle reflects a statutory requirement under the Patents Act, as inconsistency of a claim with matter disclosed in the specification can be a ground for the revocation of the patent.

6.30 The claims and the specification should be read in the light of the language employed. Where the language of the claim is clear and unambiguous, it will not be proper to extend or cut down the clear meaning

of the claim by reference to the specification. 93 This should be the case in infringement actions where 'the main function of the court is to construe the claims which are alleged to have been infringed, without reference to the body of the specification, and to refer to the body of the specification only if there is any ambiguity or difficulty in the construction of the claims in question'. 94 In other words, if the claims have a plain meaning in themselves, then advantage cannot be taken of the language used in the body of the specification to make them mean something different. 95 The principle that the monopoly of a claim cannot be expanded or curtailed by reference to the specification has been detailed by Mummery J in Glaverbel SA v British Coal Corpn: 96

In reading the specification as a whole the different functions of the claim and the rest of the specification should be observed. The claim, cast in precise language, marks out the legal limits of the monopoly granted by the patent: and "what is not claimed is disclaimed". The specification describes how to carry out the process claimed and the best method known to the patentee of doing that. Although the claims are construed in the context of the specification as a whole, it is not permissible to restrict, expand or amend the clear language of a claim by reference to a limitation or gloss in the language used in the earlier part of the specification, but not repeated in the claim itself. It is legitimate, however, to refer to the rest of the specification to explain the background to the claims, to ascertain the meaning of the technical terms, and resolve ambiguities in the construction of the claims.

6.31 For the purposes of construction, the most important part of a specification is the claim. In *Conoco Speciality Products (Inc) v Merpro Montassa Ltd*, Lord Sutherland quoting earlier authorities observed how a claim is to be construed in the light of the specification:⁹⁷

The words in a claim must be read in the light of the terms of the specification as a whole and given the appropriate meaning in that

⁸⁴ See Mayne Pharma Pty Ltd v Pharmacia Italia SPA [2005] EWCA Civ 137, para 5; Technip France SA's Patent (2004) RPC 46, para 41 (CA).

⁸⁵ Catnic Components Ltd v Hill & Smith Ltd (1982) RPC 183, p 244 (HL).

⁸⁶ Rediffusion Simulation v Link Miles [1993] FSR 369, p 388.

⁸⁷ Societe Technique de Pulverisation STEP v Emson Europe Ltd (1993) RPC 513, p 522 (CA).

⁸⁸ See Lallubhai Chakubhai Jariwala v Chimanlal Chunilal & Co AIR 1936 Bom 99, p 105, (1935) 37 Bom LR 665. See also Electric and Musical Industries Ltd v Lissen Ltd [1938] 4 All ER 221, pp 224-25, (1939) 56 RPC 23, p 39 (HL).

⁸⁹ See Electric and Musical Industries Ltd v Lissen Ltd (1937) 54 RPC 307, p 322 (CA), [1938] 4 All ER 221, (1939) 56 RPC 23 (HL).

⁹⁰ Unilever Plc v Schöler Lebensmittel GmbH [1988] FSR 596, p 599.

⁹¹ See Brugger v Medic-Aid Ltd (1996) RPC 635, p 642. See also Lallubhai Chakubhai Jariwala v Chimanlal Chunilal & Co AIR 1936 Bom 99, p 105; Biswanath Prasad Radhey Shyam v Hindusthan Metal Industries (1979) 2 SCC 511, p 525, AIR 1982 SC 1444.

⁹² Patents Act 1970, s 64(1)(i).

⁹³ See Glaverbel SA v British Coal Corpn (1995) RPC 255, p 269, [1995] FSR 254, p 264 (CA). See also British Hartford-Fairmont Syndicate Ltd v Jackson Brothers (Knottingley) Ltd (1932) 49 RPC 495, p 556; Norton-Gregory Ltd v Jacobs (1937) 54 RPC 271, p 276.

⁹⁴ Farbwerke Hoechst AG v Unichem Laboratories (1969) RPC 55, p 60, AIR 1969 Bom 255, p 261. See also Raj Prakash v Mangat Ram Choudhury AIR 1978 Del 1, (1977) Raj LR 440 (DB).

⁹⁵ See Electric and Musical Industries Ltd v Lissen Ltd (1939) 56 RPC 23, p 57, per Lord Porter.

^{96 (1994)} RPC 443, p 486 (Pat Ct). See also *Mabuchi Motor KK's Patent* (1996) RPC 387, p 406 for specific illustrations on the application of this principle.

^{97 [1992]} SLT 444, [1994] FSR 99, 106.

context. As was said in Rosedale Association Manufacturers Ltd v Carlton Tyre Saving Co Ltd [1960] RPC 59, reading the specification as a whole provides the necessary background, and in some cases the meaning of the words used in the claims may be affected or defined by what is said in the body of the specification. Once so construed however, it is not permissible to go back to the body of the specification to put a gloss on the claim extending or restricting the ambit of the monopoly; see Poseidon Industri AB v Cerosa Ltd [1989] FSR 209. While a purposive construction is necessary, it must be borne in mind that this is intended to be a method of construction and not an excuse for not construing the claims at all; see Cuthbertson [1961] RPC 267 and Codex Corporation v Racal-Milgo Ltd [1984] FSR 87.

(E) Patents Must be Given a Purposive Construction

6.32 A purposive construction, as the phrase implies, gives effect to the purpose of the inventor. The application of a purposive construction will aim at giving a sensible meaning and avoiding any absurd result, which the patentee could not have intended. Depending upon the context, a purposive construction may narrow or widen the claims from the contextual meaning. Depending upon the contextual meaning.

(i) Law before Catnic

6.33 The development of the rule of purposive construction can be traced back to a string of landmark cases, each confirming the earlier position and explaining further the details of the rule. The decision in Catnic Components Ltd v Hill & Smith Ltd¹ was the first case where the rule of purposive construction of patents was applied. Before Catnic, the issue of infringement of patents was decided employing two techniques, ie, the 'textual infringement' and the infringement of the 'pith and marrow' of the invention. According to the textual infringement rule, if the alleged infringement fell within the strict literal meaning of the claims and embodied every integer of the claim, a case for textual infringement was made out. This method followed the rule of literal construction. Allowance was made

to this rule so as not to limit the scope of the patentee's monopoly to the strict language used in the claim. The claims then came to be interpreted by its 'pith and marrow' to ensure that an infringer could not avoid infringement by making an 'immaterial variation' in the invention.

(ii) Rule of Literal Construction

6.34 The general principles of literal construction applied to the question of infringement have been summarised by the House of Lords in *Rodi and Wienenberger AG v Henry Showell Limited*,³ where Lord Upjohn, stating that the first issue is to determine whether the relevant claim has been infringed, said:⁴

In considering the claim the court must ascertain what are the essential integers of the claim; this remains a question of construction and no general principles can be laid down (see my observations in *Van der Lely v Bamfords* [1961] RPC 296 at 313 approved on appeal to this House.)

Secondly, the essential integers having been ascertained, the infringing article must be considered. To constitute infringement the article must take each and every one of the essential integers of the claim. Non-essential integers may be omitted or replaced by mechanical equivalents; there will still be infringement. I believe that this states the whole substance of the 'pith and marrow' theory of infringement. Furthermore, where the invention, as in this case, resides in a new combination of known integers but also merely in a new arrangement and interaction of ordinary working parts it is not sufficient to shew that the same result is reached; the working parts must act on one another in the way claimed in the claim of this patent. This is well illustrated by *Birmingham Sound Reproducers Ltd v Collaro Ltd* [1956] RPC 232 where Lord Evershed, MR delivering the judgment of the court said at page 245:

"Thus the essence of the invention resides wholly in the selection and arrangement of the parts and the manner in which they interact when arranged in accordance with the invention. It is therefore essential to the invention that it should consist of the particular parts described in the claim arranged and acting upon each other in the way described in the claim.

⁹⁸ See Electric and Musical Industries Ltd v Lissen Ltd [1938] 4 All ER 221, (1939) 56 RPC 23, p 39 (HL); Minnesota Mining & Manufacturing Co v Rennicks (UK) Ltd (1992) RPC 331, pp 342-43.

⁹⁹ Minnesota Mining & Manufacturing Co v Plastus Kreativ AB (1997) RPC 737, p 744.

^{1 (1982)} RPC 183.

² See Terrell on the Law of Patents, fifteenth edn, 2000, p 107.

^{3 [1968]} FSR 100, (1969) RPC 367 (HL).

⁴ Ibid, pp 120-121.

The question therefore appears to be whether the allegedly infringing apparatus consists of substantially the same parts acting upon each other in substantially the same way as the apparatus claimed as constituting the invention. It is not enough to find that the parts comprised in the respondents apparatus individually or collectively perform substantially similar functions to those performed individually or collectively by the parts comprised in the apparatus claimed as the appellants' invention, or that the respondents' apparatus produces the same result as the appellants' apparatus. It must be shown that the respondents' selection and arrangement of parts is substantially the same as the appellants' selection and arrangements of parts, for it is in such selection and arrangement that the appellants' invention resides."

6.35 As stated above, ascertaining the 'essential integers' and determining whether each and every one of them was infringed was the substance of the 'pith and marrow' doctrine. 'Textual infringement' and infringement of the 'pith and marrow' are nothing but two aspects of the literal rule of construction rule and to view them separately is liable to lead to confusion. 'Catnic disapproved the literal approach, and the same was upheld in Kirin-Amgen where Lord Hoffmann, tracing the origin of the 'pith and marrow' doctrine, said:

At the time when the rules about natural and ordinary meanings were more or less rigidly applied, the United Kingdom and American courts showed understandable anxiety about applying a construction which allowed someone to avoid infringement by making an 'immaterial variation' in the invention as described in the claims. In England, this led to the development of a doctrine of infringement by use of the 'pith and marrow' of the invention (a phrase invented by Lord Cairns in Clark v Adie (1877) 2 App Cas 315, 320) as opposed to a 'textual infringement'. The pith and marrow doctrine was always a bit vague ('necessary to prevent sharp practice' said Lord Reid in C Van der Lely NV v Bamfords Ltd [1963] RPC 61, 77) and it was unclear whether the courts regarded it as a principle of construction or an extension of protection outside the claims.

6.36 In the light of the law laid down in *Catnic*, subsequent decisions no longer find it relevant to rely on pre-*Catnic* decisions as authorities. Though the decision of the Court of Appeal in *PLG Research* did raise doubts on following the *Catnic* approach, the decision of the House of Lords in *Kirin-Amgen* has now fully endorsed the *Catnic* principle of construction as being precisely in accordance with the Protocol. 9

(iii) Rule of Purposive Construction

6.37 According to the principle of purposive construction, words must be construed having regard to the inventor's purpose as disclosed in the specification. The intention of the author of a contract or a patent specification in using the language is to make a communication for a practical purpose. Any rule of construction that gives his language a meaning different from the way it would have been understood by the people to whom it was actually addressed may defeat his intentions. The purposive rule of construction gives effect to this principle. The oft-quoted passage from Catnic illustrates the purposive approach followed in the construction of patents: 12

My Lords, a patent specification is a unilateral statement by the patentee, in words of his own choosing, addressed to those likely to have a practical interest in the subject matter of his invention (ie 'skilled in the art'), by which he informs them what he claims to be the essential features of the new product or process for which the letters patent grant him a monopoly. It is those novel features only that he claims to be essential that constitute the so-called 'pith and marrow' of the claim. A patent specification should be given a purposive construction rather than a purely literal one derived from

⁵ Catnic Components v Hill & Smith (1982) RPC 183, p 242, per Lord Diplock.

⁶ Kirin-Amgen Inc v Hoechst Marion Roussel Ltd (2005) RPC 9, para 36.

⁷ See Codex Corpn v Racal-Milgo Ltd (1983) RPC 369, p 380; Improver Corpn v Remington Consumer Products Ltd (1989) RPC 69, pp 77-78 (CA); Edwards (AC) Ltd v Acme Signs & Displays Ltd (1990) RPC 621, p 634; Minnesota Mining & Manufacturing Co v Rennicks (UK) Ltd (1992) RPC 331; Southco Inc v Dzus Fastener Europe Ltd (1992) RPC 299 (CA).

⁸ PLG Research Ltd v Ardon International Ltd [1995] FSR 116, (1995) RPC 287, where the Court of Appeal rejected the Catnic approach. But see Assidoman Multipack Ltd v Mead Corpn (1995) RPC 321, p 337, per Aldous J and Beloit Technologies Inc v Valmet Paper Machinery Inc (1995) RPC 705, pp 719-721, per Jacob J, where the Patents Court declined to follow PLG Research and fully endorsed the Catnic approach.

⁹ Kirin-Amgen Inc v Hoechst Marion Roussel Ltd (2005) RPC 9, para 48.

¹⁰ See Minnesota Mining & Manufacturing Co v Plastus Kreativ AB (1997) RPC 737, p 743; Mayne Pharma Pty Ltd v Pharmacia Italia SPA [2005] EWCA Civ 137 para 30.

¹¹ Kirin-Amgen Inc v Hoechst Marion Roussel Ltd (2005) RPC 9, para 30.

¹² Catnic Components v Hill & Smith (1982) RPC 183, p 242, per Lord Diplock.

applying to it the kind of meticulous verbal analysis in which lawyers are too often tempted by their training to indulge. The question in each case is: whether persons with practical knowledge and experience of the kind of work in which the invention was intended to be used, would understand that strict compliance with a particular descriptive word or phrase appearing in a claim was intended by the patentee to be an essential requirement of the invention so that *any* variant would fall outside the monopoly claimed, even though it could have no material effect upon the way the invention worked.

The question, of course, does not arise where the variant would in fact have a material effect upon the way the invention worked. Nor does it arise unless at the date of publication of the specification it would be obvious to the informed reader that this was so. Where it is not obvious, in the light of then-existing knowledge, the reader is entitled to assume that the patentee thought at the time of the specification that he had good reason for limiting his monopoly so strictly and had intended to do so, even though subsequent work by him or others in the field of the invention might show the limitation to have been unnecessary. It is to be answered in the negative only when it would be apparent to any reader skilled in the art that a particular descriptive word or phrase used in a claim cannot have been intended by a patentee, who was also skilled in the art, to exclude minor variants which, to the knowledge of both him and the readers to whom the patent was addressed, could have no material effect upon the way in which the invention worked.

(a) Improver or Protocol Questions

6.38 This statement by Lord Diplock led to the formulation of the Improver or Protocol questions in determining whether a claim will include variants. As the questions pertain to the application of Protocol, it may not be necessary to discuss the same for the purposes of the Patents Act, more so in the light of the observations made in *Kirin-Amgen* that the Protocol questions are useful only in some cases. ¹³ The question raised in *Catnic* and in some decisions that followed was: would the skilled reader consider that the patentee had intended to exclude the variant in question?

6.39 Citing the above passage from Catnic, Lord Hoffmann said in Kirin-Amgen: 14

In Improver Corp v Remington Consumer Products Ltd [1990] FSR 181, 189, I tried to summarise this guidance:

"If the issue was whether a feature embodied in an alleged infringement which fell outside the primary, literal or acontextual meaning of a descriptive word or phrase in the claim ('a variant') was nevertheless within its language as properly interpreted, the court should ask itself the following three questions:¹⁵

- (1) Does the variant have a material effect upon the way the invention works? If yes, the variant is outside the claim. If no?
- (2) Would this (ie that the variant had no material effect) have been obvious at the date of publication of the patent to a reader skilled in the art? If no, the variant is outside the claim. If yes?
- (3) Would the reader skilled in the art nevertheless have understood from the language of the claim that the patentee intended that strict compliance with the primary meaning was an essential requirement of the invention? If yes, the variant is outside the claim.

On the other hand, a negative answer to the last question would lead to the conclusion that the patentee was intending the word or phrase to have not a literal but a figurative meaning (the figure being a form of synecdoche or metonymy) denoting a class of things which include the variant and the literal meaning, the latter being perhaps the most perfect, best-known or striking example of the class.

Distinguishing the principle of purposive construction from the Protocol questions, Lord Hoffmann said:

These questions, which the Court of Appeal in Wheatley v Drillsafe Ltd [2001] RPC 133, 142 dubbed 'the Protocol questions' have been used by English courts for the past 15 years as a framework for deciding whether equivalents fall within the scope of the claims. On the whole, the judges appear to have been comfortable with the results, although some of the cases have exposed the limitations of the method. When speaking of the 'Catnic principle' it is important to distinguish between, on the one hand, the principle of purposive construction

¹³ Kirin-Amgen Inc v Hoechst Marion Roussel Ltd (2005) RPC 9, para 52.

¹⁴ Ibid, paras 51-52.

¹⁵ For cases discussing these issues, see Insituform Technical Services v Inliner UK (1992) RPC 83; Sundstrand Corpn v Safe Flight Instrument Corpn [1994] FSR 599; Optical Coating Laboratory Inc v Pilkington PE Ltd (1995) RPC 145; Kastner v Rizla Ltd (1995) RPC 585; Beloit v Valmet (No 2) (1995) RPC 705; Minnesota Mining & Manufacturing Co v Plastus Kreativ AB (1997) RPC 737, p 747; Impro Ltd's Patent [1998] FSR 299; Union Carbide Corpn v BP Chemicals Ltd (1999) RPC 409.

which I have said gives effect to the requirements of the Protocol, and on the other hand, the guidelines for applying that principle to equivalents, which are encapsulated in the Protocol questions. The former is the bedrock of patent construction, universally applicable. The latter are only guidelines, more useful in some cases than in others. I am bound to say that the cases show a tendency for counsel to treat the Protocol questions as legal rules rather than guides which will in appropriate cases help to decide what the skilled man would have understood the patentee to mean.

6.40 The rule of purposive construction stated by the decision of the House of Lords in *Catnic* was statutorily incorporated in s 125 of the UK Patents Act 1977 and confirmed by the House of Lord in *Kirin-Amgen Inc v Hoechst Marion Roussel Ltd.*¹⁶ In his speech, Lord Hoffmann said:¹⁷

'Purposive construction' does not mean that one is extending or going beyond the definition of the technical matter for which the patentee seeks protection in the claims. The question is always what the person skilled in the art would have understood the patentee to be using the language of the claim to mean. And for this purpose, the language he has chosen is usually of critical importance. The conventions of word meaning and syntax enable us to express our meanings with great accuracy and subtlety and the skilled man will ordinarily assume that the patentee has chosen his language accordingly. As a number of judges have pointed out, the specification is a unilateral document in words of the patentee's own choosing. Furthermore, the words will usually have been chosen upon skilled advice. The specification is not a document inter rusticos for which broad allowances must be made. On the other hand, it must be recognised that the patentee is trying to describe something which, at any rate in his opinion, is new; which has not existed before and of which there may be no generally accepted definition. There will be occasions upon which it will be obvious to the skilled man that the patentee must in some respect have departed from conventional use of language or included in his description of the invention some element which he did not mean to be essential. But one would not expect that to happen very often.

The above principles on construction of patents as set out in Lord Hoffmann's speech in Kirin-Amgen wherein he had approved the observations of Jacob LJ in Technip SA's Patent¹⁸ as an 'admirable summary of the law on infringement'. Though Jacob LJ restated the same principles in Mayne Pharma Pty Ltd v Pharmacia Italia SpA, ¹⁹ the summary by Pumfrey J in Halliburton Energy Services Inc v Smith International (North Sea) Ltd²⁰ is more detailed and the same is reproduced below with additional information:²¹

- (a) The first, overarching principle, is that contained in Art 69 itself. Sometimes I wonder whether people spend more time on the gloss to Art 69, the Protocol, than to the Article itself, even though it is the Article which is the main governing provision.²²
- (b) Art 69 says that the extent of protection is determined by the terms of the claims. It goes on to say that the description and drawings shall be used to interpret the claims. In short the claims are to be construed in context.²³
- (c) It follows that the claims are to be construed purposively-the inventor's purpose being ascertained from the description and drawings.²⁴
- (d) It further follows that the claims must not be construed as if they stood alone—the drawings and description only being used to resolve any ambiguity. The Protocol expressly eschews such a method of construction but to my mind that would be so without the Protocol. Purpose is vital to the construction of claims.²⁵
- (e) When ascertaining the inventor's purpose, it must be remembered that he may have several purposes depending on the level of generality

^{16 (2005)} RPC 9, [2005] 1 All ER 667.

¹⁷ Ibid, para 34.

^{18 (2004)} RPC 46. Also cited as Rockwater Ltd v Technip France SA [2004] EWCA Civ 381.

^{19 [2005]} EWCA Civ 137, para 5. See also Jerome Canady v Erbe Elektromedizin GmbH [2005] EWHC 2946 (Pat).

^{20 (2006)} RPC 2, [2005] EWHC 1623 (Pat).

²¹ Ibid, para 68.

²² This is similar to the requirements under s 10(4)(c) of the Patents Act 1970.

²³ See Codex Corpn v Racal-Milgo Ltd (1983) RPC 369 (CA); Societé Nouvelle des Bennes Saphem v Edbro (1983) RPC 345; Willemijn Houdstermaatschappij BV v Madge Networks Ltd (1992) RPC 386.

²⁴ In the process of applying the principle of purposive construction, the court shall not rewrite or amend the claim in the guise of construing it. See *Norton & Gregory v Jacobs* (1937) 54 RPC 271, p 276.

²⁵ While a purposive construction is necessary, it should not be used as an excuse for not construing the claims. See Conoco Speciality Products v Merpro Montassa Ltd [1994] FSR 99, p 106.

of his invention. Typically, for instance, an inventor may have one, generally more than one, specific embodiment as well as a generalised concept. But there is no presumption that the patentee necessarily intended the widest possible meaning consistent with his purpose be given to the words that he used: purpose and meaning are different.²⁶

- (f) Thus purpose is not the be-all and end-all. One is still at the end of the day concerned with the meaning of the language used. Hence the other extreme of the Protocol a mere guideline is also ruled out by Art 69 itself. It is the terms of the claims which delineate the patentee's territory.
- (g) It follows that if the patentee has included what is obviously a deliberate limitation in his claims, it must have a meaning. One cannot disregard obviously intentional elements.²⁷ Hoffmann LJ put it this way in *STEP v Emson* [1993] RPC at 522:

'The well known principle that patent claims are given a purposive construction does not mean that an integer can be treated as struck out if it does not appear to make any difference to the inventive concept. It may have some other purpose buried in the prior art and even if this is not discernible, the patentee may have had some reason of his own for introducing it.'

- (h) It also follows that where a patentee has used a word or phrase which, acontextually, might have a particular meaning (narrow or wide) it does not necessarily have that meaning in context. A good example of this is the *Catnic* case itself-'vertical' in context did not mean 'geometrically vertical', it meant 'vertical enough to do the job' (of supporting the upper horizontal plate). The so-called 'Protocol questions' (those formulated by Hoffmann J in *Improver v Remington* [1990] FSR 181 at p 189) are of particular value when considering the difference of meaning between a word or phrase out of context and that word or phrase in context. At that point the first two Protocol questions come into play. But once one focuses on the word in context, the Protocol question approach does not resolve the ultimate question—what does the word or phrase actually mean, when construed purposively? That can only be done on the language used, read in context.
- (i) It further follows that there is no general 'doctrine of equivalents.' Any student of patent law knows that various legal systems allow for such a concept, but that none of them can agree what it is or should be. Here is not the place to set forth the myriad versions of such a doctrine. For my part I do not think that Art 69 itself allows for such a concept—it says the extent of protection shall be determined by the terms of the claims. And so far as I can understand, the French and German versions mean the same thing. Nor can I see how the Protocol can create any such doctrine.²⁹
- (j) On the other hand purposive construction can lead to the conclusion that a technically trivial or minor difference between an element of a claim and the corresponding element of the alleged infringement nonetheless falls within the meaning of the element when read purposively. This is not because there is a doctrine of equivalents: it is because that is the fair way to read the claim in context.
- (k) Finally purposive construction leads one to eschew what Lord Diplock in *Catnic* called (at p 243): 'the kind of meticulous verbal analysis which lawyers are too often tempted by their training to indulge.'

(b) Doctrine of Equivalents

6.41 It will be appropriate to discuss the relevance of doctrine of equivalents at this juncture. The doctrine of equivalents is applied to cover

²⁶ In Technip France SA' Patent (2004) RPC 46 (CA), cl (e) read:

⁽e) When ascertaining the inventor's purpose, it must be remembered that he may have several purposes depending on the level of generality of his invention. Typically, for instance, an inventor may have one, generally more than one, specific embodiment as well as a generalised concept. It is the latter which matters when construing the claim, particularly the widest claim. Otherwise one is in danger of being unfair to the inventor. I put it this way in *Tickner v Honda Motor Co Ltd* [2002] EWHC 8 (Patents), para 28: "The whole approach goes by the sobriquet 'purposive construction'. You learn the inventor's purpose by understanding his technical contribution from the specification and drawings. You keep that purpose in mind when considering what the terms of the claim mean. You choose a meaning consistent with that purpose-even if that involves a meaning which, acontextually, you would not ascribe to the word or phrase. Of course in this exercise you must also be fair to the patentee—and in particular must not take too narrow a view of his purpose—it is the *widest purpose consistent with his teaching* which should be used for purposive construction." [Emphasis supplied.]

In *Kirin-Amgen*, Lord Hoffmann disapproved the proposition that a fair reading of the claims meant that they should be given the 'widest purpose consistent with [the patentee's] teaching'.

²⁷ See STEP v Emson (1993) RPC 513, p 522. See also Uni-Continental Holdings v Eurobound Adhesives [1999] FSR 263, p 271; Palmaz's Patents (1999) RPC 47, p 77; Beloit v Valment (No 2) (1995) RPC 705, p 720.

²⁸ See Minnesota Mining & Manufacturing Co v Plastus Kreativ AB (1997) RPC 737, p 744.

²⁹ The position is same in India. See Kirin-Amgen Inc v Hoechst Marion Roussel Ltd (2005) RPC 9, paras 36-40.

equivalents not expressly mentioned in the claims. It involves the extension the scope of a patent to cover something outside the literal wording of the claims. It is a well-settled principle that a specification should not be constructed to mean a thing which was beyond the contemplation of the patentee. The extent of the protection shall be decided by the terms of the claims alone. There is no need to apply the doctrine of equivalents as the purposive construction of a claim would enable one to determine whether any technically trivial or minor difference between the element of claim and the corresponding element of the alleged infringement would fall within the meaning of the element. In Kirin-Amgen, holding that the doctrine of equivalents will not be applied by the courts in the United Kingdom, Lord Hoffmann said:

The solution, said Lord Diplock, was to adopt a principle of construction which actually gave effect to what the person skilled in the art would have understood the patentee to be claiming.

Since the *Catnic* case we have art 69 which, as it seems to me, firmly shuts the door on any doctrine which extends protection outside the claims. I cannot say that I am sorry because the Festo litigation suggests, with all respect to the courts of the United States, that American patent litigants pay dearly for results which are no more just or predictable than could be achieved by simply reading the claims.

6.42 The situation is similar in India, as protection is granted only for what is sufficiently and clearly defined in the claim. This is evident from a combined reading of s 64(1)(i) of the Patents Act, which requires the scope of any claim in the complete specification to be sufficiently and clearly defined, failing which it could be a ground for revocation and s 10(4)(c) of the Patents Act which confines the scope of protection to what is claimed. The doctrine of equivalents is unlikely to be applied in the interpretation of patents. Even at the policy level, the patent law in India has much in common to the law as it has developed in United Kingdom than its practice and application in the United States.³³

(F) Subsequent Conduct of the Patentee is Not an Aid to Interpretation

6.43 The construction of patents involves a unique situation where the court will try to construe the words of the patentee with the understanding of a hypothetical skilled addressee.³⁴ A patent, like any other written document, will be attributed the meaning as at the time when it was made. The courts will not alter or ascertain that meaning by placing reliance on how the patentee subsequently acted upon it or interpreted it.³⁵ This proposition proceeds from the general rule that extrinsic evidence is not admissible for the construction of a written contract and that the subsequent actions of a party to the contract shall not be taken into account for interpreting the same.³⁶

(i) Estoppel by Earlier Patents

6.44 Subsequent conduct of the patentee may give rise to estoppel but may not be relevant for construing specifications. The issue of estoppel may arise in cases where the meaning attributed to one patent by the patentee is contradicted by its own corresponding patent. It is a general principle of law that it is not possible to approbate and reprobate. In common parlance, a person will not be permitted to 'blow hot and cold'. The issue of estoppel has to be pleaded specifically and election on the part of the patentee has to be shown.³⁷ In any case, a patentee shall not be estopped from contradicting an erroneous statement in a specification on which another party has not relied.³⁸

(ii) Estoppel by Prosecution History

6.45 Similarly, statements made by the patentee in prosecuting patents cannot be used as an aid to construction as such statements will be regarded as admissions against interest.³⁹ Though the courts in United Kingdom generally discourage, they do not entirely prohibit the use of patent office file in aid of construction.⁴⁰ In United States, this doctrine is known as 'file

169

³⁰ Minnesota Mining & Manufacturing Co v Rennicks (UK) Ltd (1992) RPC 331, p 342; Rediffusion Simulation Ltd v Link-Miles Ltd [1993] FSR 369.

³¹ Technip SA's Patent (2004) RPC 46, para 41(CA).

³² Kirin-Amgen Inc v Hoechst Marion Roussel Ltd (2005) RPC 9, paras 43-44.

³³ To give one such instance, patents for business methods and computer programmes are not granted under the UK Patents Act 1977 and Patents Act 1970, while it is granted under the US law.

³⁴ Kirin-Amgen Inc v Hoechst Marion Roussel Ltd (2005) RPC 9, para 32.

³⁵ See Glaverbel SA v British Coal Corpn (1993) RPC 90, p 94.

³⁶ Schuler AG v Wickman Machine Tools Sales Ltd [1974] AC 235, p 261 (HL). See also the Indian Evidence Act 1872, ss 91 and 92.

³⁷ See Glaverbel SA v British Coal Corpn [1995] FSR 254, p 265, where the Court of Appeal held that the issue of estoppel was neither pleaded nor established.

³⁸ Gerber Garment Technology Inc v Lectra Systems Ltd [1995] FSR 492 (CA).

See Furr v CD Truline (Building Products) Ltd [1985] FSR 553, pp 563-64.
Kirin-Amgen Inc v Hoechst Marion Roussel Ltd (2005) RPC 9, para 35.

wrapper estoppel' or 'prosecution history estoppel'. The observations made in *Bristol-Myers Squibb Co v Baker Norton Pharmaceuticals Inc*, ⁴¹ illustrate the problems associated with taking prosecution history as an aid to the construction of the final specification:

So if one has regard to the prosecution history one can see that the wider meaning now contended for was intended, thus reinforcing that construction. Now there are several points to be made about a claim construction argument based on the prosecution history. First, whether that history can, and if so how, be used as an aid to construction would not be governed by national rules of construction. Claim construction is no longer a matter for national law but is governed by Article 69 and the Protocol. Thus, by way of example, specific English law notions of estoppel, cannot, as such, be used to construe the claim. Preventing him from asserting such a wide construction may be different - a specific English law defence. Second, there is an obvious important practical difference between merely referring to the specification as originally filed as an aid to construction and referring to detailed matter (e.g. contentions in correspondence or evidence) as contained in the EPO file. The specification as filed is a published document (the 'A' specification) and is referred to in the specification as granted. The intermediate processing correspondence with the examiner is different in volume and character, not least because it is not normally translated. Thirdly, there is another obvious difference between using the prosecution history to widen the claim and using that history to narrow it. It would be unfair on the public if material they would not normally look at could serve as a basis for supporting a wide construction of the claim. But there is not the same sort of unfairness if a patentee having contended for a narrow construction of his claim during prosecution is held to that construction later (cf Furr v Truline (Building Products) Ltd [1985] FSR 553, an English case). Fourthly there is a difference between merely resolving a puzzle in the specification (though not the claim) by reference to the specification as filed and using the specification as filed as an aid to construction of the claim itself. I used the former in relation to an example in the patent in Milliken Denmark AS v Walk Off Mats Ltd [1996] FSR 292, 299. All these are matters to be considered, perhaps by the Enlarged Board of Appeal or, if current proposals were to proceed, by a European Patent Court. Fortunately I do not have to consider them here.

6.46 There are instances where the court has looked into the priority document or specification as filed, 42 letter written by the patent office, 43 prosecution file showing that the patentee had deliberately chosen a more limited word during amendment 44 for resolving some puzzling feature of the specification. The courts may, however, not resort to the prosecution history of the patent where the meaning of the claim is clear on the face of the document. 45 As patents are statements made by patentees to the public, their meaning should not be affected by extrinsic evidence such as prosecution history. To allow such evidence would undermine the public notice function of the claims, and probably create uncertainty. The principle of purposive construction which depends on the language used in the claims will be inconsistent with the doctrine of 'file wrapper' estoppel which holds the statements made by the patentee in prosecution of the patent as binding. 46

(G) Patents Must be Construed Without Reference to the Prior Art

6.47 A claim must not be construed with an eye on prior material, with the purpose of avoiding its effect. ⁴⁷ In the context of art 69 of the EPC, which is similar in its content to s 10(4)(c) of the Patents Act, Jacob J said in *Beloit Technologies Inc v Valmet Paper Machinery Inc*: ⁴⁸

I believe Article 69 of the EPC does not legitimately allow courts to construe claims using the prior art either to widen them or narrow them. There is normally no reason to suppose the patentee when he set the limits of his monopoly, knew of a particular piece of prior art, which is therefore irrelevant in deciding what those limits are. Of course the position is different if the prior art is specifically acknowledged in the patent. The purposive construction would lead to a construction of a claim which did not cover that acknowledged prior art: it can hardly have been the inventor's purpose to cover that which he expressly recognises was old.

⁴² Milliken Denmark AS v Walk Off Mats Ltd [1996] FSR 292, p 299.

⁴³ Rohm and Haas Co v Collag Ltd [2002] FSR 28, para 42.

⁴⁴ Wesley Jessen Corpn v Coopervision Ltd (2003) RPC 20, paras 87-88.

⁴⁵ Telsonic AG's Patent (2004) RPC 38, para 30. Also reported as Russel Finex Ltd v Telsonic AG [2004] EWHC 474 (Ch).

⁴⁶ Free World Trust v Électro Santé, [2001] FSR 45, paras 65-66.

⁴⁷ Molins Ltd v Industrial Machinery Co Ltd (1938) 55 RPC 31, p 39, [1937] 4 All ER 295 (CA).

^{48 (1995)} RPC 705, p 720.

^{41 (1999)} RPC 253, pp 274-75.

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^{48 (1995)} RPC 705, p 720.

^{41 (1999)} RPC 253, pp 274-75.

(H) Courts Should Discourage the Introduction of New Requirements

6.48 The purposive method of construction will not permit the introduction of any additional requirement over and above the ones stipulated by law. However, it is permissible for the court to introduce the requirements stated in s 10 of the Patents Act, the ingredients of which any complete specification must necessarily comply with. For instance, the court may introduce, by way of construction, the requirement that the claim must be fairly based on the matter disclosed in the specification. The UK Patents Act 1949 provided for such a requirement too. However, in Auchincloss v Agricultural & Veterinary Supplies Ltd, a case decided by the Court of Appeal in the context of the UK Patents Act 1977, it was held that the introduction of a requirement that the claim must be fairly based on the patent specification will not be permissible as the same was no longer a requirement under the UK Patents Act 1977.

(I) Courts Shall Not Resolve a Doubt in Favour of or Against the Patentee

6.49 The requirement of disclosure to third parties is a vital part of a complete specification. The Patents Act requires every specification to fully and particularly describe the invention and its operation or use and the method by which it is to be performed. The purposive construction will not allow the court to resolve a doubt in favour of the patentee or in favour of a strict or literal construction. Such an approach would result in rewarding opaque drafting. A specification must be construed impartially, in a neutral manner without 'narrowing or widening the boundaries of the monopoly fixed by the plain words of a claim'. It follows that courts shall be reluctant to resolve difficulties in construction either in favour of the patentee. The patentee of the patentee of the patentee or against the patentee.

(J) Ambiguous Claims Should Not be Given a Wide Interpretation

6.50 Lack of clarity is a ground for revocation of a patent under the Patents Act. Similarly, if the scope of any claim of the complete specification is not sufficiently or clearly defined, it could also be a ground for revocation. But the mere fact that a word, phrase or other provision in a patent claim is not wholly clear will not automatically lead to the conclusion that the claim is objectionable, as this would set an unrealistic standard for drafting in any field. A claim needs to be as clear as the subject matter reasonably permits. 60

6.51 Sufficient care should be taken in drafting patents as cautioned by Lord Loreburn in Natural Colour Kinematograph Ltd v Bioschemes Ltd:⁶¹

I think this patent is bad for ambiguity in the specification. There seems to be some danger of the well-known rule of law against ambiguity being in practice invaded. Some of those who draft specifications and claims are apt to treat this industry as a trial of skill, in which the object is to make the claim very wide upon one interpretation of it, in order to prevent as many people as possible from competing with the patentee's business, and then to rely upon carefully prepared sentences in the specification which, it is hoped, will be just enough to limit the claim within safe dimensions if this is attacked in court. This leads to litigation as to the construction of specifications, which could generally be avoided if at the outset a sincere attempt were made to state exactly what was meant in plain language. The fear of a costly law suit is apt to deter any but wealthy competitors from contesting a patent. This is all wrong. It is an abuse which a court can prevent, whether a charge of ambiguity is or is not raised on the pleadings because it affects the public by practically enlarging the monopoly, and does so by a kind of pressure which is very objectionable. It is the duty of a patentee to state clearly and distinctly, either in direct words or by clear and distinct reference, the nature and limits of what he claims. If he uses language which, when fairly read, is avoidably obscure or ambiguous, the patent is invalid, whether the defect be due to design, or to carelessness or to want of skill. When the invention is difficult to explain, due allowance will, of course, be made for any resulting difficulty in the language.

⁴⁹ Patents Act 1970, s 10(5).

^{50 (1999)} RPC 397, p 402 (CA).

⁵¹ Patents Act 1970, s 10(4)(a).

⁵² Assidoman Multipak Ltd v Mead Corpn (1995) RPC 321, p 332.

⁵³ BASF AG v SmithKline Beecham Plc (2003) RPC 49, para 104 (CA).

⁵⁴ See Lallubhai Chakubhai Jariwala v Chimanlal Chunilal & Co AIR 1936 Bom 99, p 105.

⁵⁵ Electric and Musical Industries Ltd v Lissen Ltd [1938] 4 All ER 221, (1939) 56 RPC 23 (HL) per Lord Russell of Killowen.

⁵⁶ BASF AG v SmithKline Beecham Plc (2003) RPC 49, para 103 (CA).

⁵⁷ See Scanvaegt v Pelcombe [1998] FSR 786, p 796.

⁵⁸ Patents Act 1970, s 64(1)(h).

⁵⁹ Ibid, s 64(1)(i).

⁶⁰ LG Philips LCD Co Ltd v Tatung (UK) Ltd [2006] EWCA Civ 1774, para 20.

^{61 (1915) 32} RPC 256, p 266.

But nothing can excuse the use of ambiguous language when simple language can easily be employed, and the only safe way is for the patentee to do his best to be clear and intelligible. It is necessary to emphasize this warning. To my mind, this is a very plain case of offence against the rule to which I have referred. I cannot see what purpose there could have been for using the roundabout language here employed, which has provoked so much argumentative subtlety and taken up so much time, unless the object was to hold in reverse a variety of constructions for use if the patent should be called into question, and in the meantime to frighten off those who might be disposed to challenge the patent.

- 6.52 A claim in a specification will not be ambiguous merely because some part of it is capable of more than one construction or is difficult to construe. In such cases, the court should prefer the sensible construction and would read the claim in such a manner so as to avoid an absurd result. As the patentee is free to use the language he likes to define his invention, the court has to guard against being impressed by the form and language of the claims rather than the substance of the patentee's alleged technical contribution'. Where the claims are prolix and opaque, the court should break free of the language and concern itself with what the claims really mean. An ambiguous claim can result in the patentee being unable to establish infringement. The courts may also impose costs for poor and ambiguous drafting.
- 6.53 Ambiguous claims are drafted so that the patentee may claim the widest possible scope for the invention. The courts have cautioned not to interpret the claims so as to give a patentee the widest possible scope. Referring to an earlier decision, Lord Hoffmann said in *Kirin-Amgen*:⁶⁸

The only point on which I would question the otherwise admirable summary of the law on infringement in the judgment of Jacob LJ in *Rockwater Ltd v Technip France SA* (unreported) [2004] EWCA Civ 381, at [41],⁶⁹ is when he says in sub-para (e) that to be "fair to the

patentee" one must use "the widest purpose consistent with his teaching". This, as it seems to me, is to confuse the purpose of the utterance with what it would be understood to mean. The purpose of a patent specification, as I have said, is no more nor less than to communicate the idea of an invention. An appreciation of that purpose is part of the material which one uses to ascertain the meaning. But purpose and meaning are different. If, when speaking of the widest purpose, Jacob LJ meant the widest meaning, I would respectfully disagree. There is no presumption about the width of the claims. A patent may, for one reason or another, claim less than it teaches or enables.

FORM AND STRUCTURE OF CLAIMS

- 6.54 Patents are granted for products as well as processes. To establish infringement of a product patent, the infringing article should fall within the claims of the patent, whether or not such article was actually used. A process patent will require all the ingredients and the steps to be followed in that particular manner to constitute infringement. The forms in which a patent is drafted vary significantly and may have an impact on the manner in which they are constructed.
- 6.55 Process claims cover the product directly obtained by that process. 71 In the past, when the patent office granted only process patents for pharmaceuticals, there was a tendency to file as many process claims for the same product to enlarge the scope of monopoly of the process and thereby restrict others from using new processes. With the new law permitting product patents for pharmaceuticals, claims drafted for a product obtained by a particular process will provide protection only for that process. Inventors can be expected to go for full-fledged protection offered by a product patent. Though a process will cover the product obtained by that process, a new process in itself will not make the product new as it would still be the same product regardless of how it is made. 72

(A) Selection Patents and Swiss Claims

6.56 As s 3(d) of the Patents Act will act as a bar for claiming selection patents and novelty of use in the form of Swiss claims, the form in which a

⁶² Henriksen v Tallon Ltd (1965) RPC 434, p 443, [1965] FSR 215 (HL).

⁶³ Ibid.

⁶⁴ Raychem Corpn's Patents (1998) RPC 31, p 37.

⁶⁵ Ibid.

⁶⁶ See Scanvaegt International als v Pelcombe Ltd [1998] FSR 786, p 797 (CA). See also Milliken Denmark als v Walk Off Mats Ltd [1996] FSR 292, p 301.

⁶⁷ See Lubrizol Corpn v Esso Petroleum Co Ltd (1998) RPC 727, p 788.

⁶⁸ Kirin-Amgen Inc v Hoechst Marion Roussel Ltd (2005) RPC 9, para 33.

⁶⁹ Also reported as Technip SA's Patent (2004) RPC 46 (CA).

⁷⁰ Technip SA's Patent (2004) RPC 46, para 68 (CA).

⁷¹ Patents Act 1970, s 48(b).

⁷² See Kirin-Amgen Inc v Hoechst Marion Roussel Ltd (2005) RPC 9, para 90.

selection patent or a Swiss claim is drafted becomes relevant for the purposes of construction.⁷³

(B) Single Inventive Concept

6.57 Section 10(5) of the Patents Act states that a claim of a complete specification shall relate to a single invention or a 'single inventive concept'. The construction of the claims will be essential to determine whether a prior claim could properly be regarded as the summation of a number of notional separate claims to alternative ingredients in a manner of manufacture or a claim to a generalised manner of manufacture in which the identity of the ingredients, save in the broad sense of inclusion in a chemical classification, was not essential.⁷⁴ In cases involving chemical patents, the courts have held that whether a general formula can be regarded as a convenient way of specifying a number of alternatives which would occur to the reader on seeing the formula must be a matter of degree. 75 As a matter of construction, if the courts perceive that any particular compound would, as a matter of course, occur to the reader as being included within and disclosed by the formula, then it would be proper to notionally 'rewrite the claim' so as to include such a compound specifically within its scope. 76 The issue of notionally splitting the claims in a specification arises in determining obviousness.

(C) Title

6.58 In construing specifications, too much reliance on the title given to the specifications of the invention may not be proper. It is settled law that the title of the specifications of an invention claimed does not control the actual claim. A misleading title similarly is of little consequence.⁷⁸

(D) Subsidiary Claims

6.59 Claims are usually drafted in such a manner that the broader claims figure first followed by subsidiary claims of narrower scope, ie, the broader

claims will be interpreted widely as including the subsidiary claim. Subsidiary claims have a narrower scope than the antecedent claims to which they are appended. In the case of a subsidiary claim, which adds a new element to what is already claimed in the earlier claim, the added element will be regarded as the only inventive step of the subsidiary claim. Words introduced in the subsidiary claim shall not be used to give meaning to the earlier claim which is devoid of such words. The court will not allow a limitation in a claim to be construed differently when it is read on its own from what it would mean if read together with other sub-claims. As subsidiary claims are appended to a broader antecedent claim, it may offer guidance for the construction of the antecedent claim to which it is appended. The courts should endeavour to give different meanings to different claims. But if claims do not differ in their meaning, the natural meaning of the claims should be given effect.

(E) Amended Specification

6.60 All amendments to a specification will be treated as a part of that specification. Amended specifications will be construed as they exist after the amendment.

(F) Common Words and Expressions

6.61 The construction of phrases and expression used in a specification will depend on the facts and circumstances of each case. 86 Words have acontextual meanings but an interpretation should be with regard to the context in which it is used. Selected instances of the approach followed by the court in interpreting some of the commonly used expressions is discussed below.

⁷³ For details, see ch 3.

⁷⁴ Merck & Co (Macek's) Patent [1966] FSR 381, p 386, (1967) RPC 157.

⁷⁵ Allen and Hanburys Ltd (Hayes') Application (1977) RPC 113, p 117.

⁷⁶ Ibid.

⁷⁷ Imperial Chemical Industries Ltd (Howe's) Application (1977) RPC 121. For further details on claim splitting, see para 5.54.

⁷⁸ Raj Prakash v Mangat Ram Choudhury AIR 1978 Del 1 (DB).

⁷⁹ See Ultraframe v Eurocell Building Plastics [2005] EWCA (Civ) 761, para 41.

⁸⁰ Glaverbel SA v British Coal Corpn (No 4) (1995) RPC 255, p 281.

⁸¹ See Van der Lely NV v Bamfords Ltd (1963) RPC 61, p 78 (HL).

⁸² Submarine Signal Co & Submarine Signal Corpn v Hughes & Son (1931) 41 Ll L Rep 21, p 30, (1931) 49 RPC 149, where the court refused to import into claim 1 the element of automaticity found in claim 2.

⁸³ See Minnesota Mining & Manufacturing Co v Plastus Kreativ AB (1997) RPC 737, p 752.

⁸⁴ Glaverbel SA v British Coal Corpn (No 4) (1995) RPC 255, p 281.

⁸⁵ See Cleveland Graphite Bronze Co v Glacier Metal Co Ltd (1950) 67 RPC 149, p 153. See also Raleigh Cycle Co Ltd v H Miller & Co Ltd [1948] 1 All ER 308, (1948) 65 RPC 141 (HL).

⁸⁶ See Electrolux Northern v Black & Decker [1996] FSR 595, p 604.

(i) 'Consisting of'

6.62 The words 'consisting of' will be construed as limiting to what has been specifically described. In a case involving 'pharmaceutical suspension formulation suitable for aerosol administration', such words were construed literally to 'cover compositions consisting only of dispersed drug and propellant having the specified features'.⁸⁷

(ii) 'Substantially as Described'

6.63 Claims usually begin with the one disclosing the invention in its broadest aspect, and are followed by narrower claims. In cases where drawing and other descriptions form a part of the specification, the claims would end with the words 'substantially as described'. Such claims will be construed in the light of the drawings and descriptions referred to. 88 A claim which ends with the words 'substantially as described' will be construed as a narrow claim, limited to things that are so described. 89 But where the words 'substantially as described' are used without reference to any drawings or descriptions, such a claim may be held to be ambiguous. 90 Similarly, a claim ending with the words 'substantially as described' will be regarded as being ambiguous, if the embodiments shown in the drawings are not contained in the claim.

(iii) 'Suitable For'

6.64 Where the claim is for an article 'suitable for' a particular use, the claim is for the article per se regardless of the use it may be put to. ⁹² But it will be necessary to show that the article is suitable for the particular purpose which was claimed. ⁹³ In certain contexts, the use of an article 'for' a particular

use will be regarded as 'suitable for' a particular use⁹⁴ and may be construed as a limitation.⁹⁵

(iv) 'In Order To'

6.65 A sentence beginning with 'in order to' will be construed as a mere surplusage and shall not be construed to limit the scope of the claim. 96

(G) Words With Multiple Meanings

6.66 Words with multiple meanings will be construed contextually. Words with multiple meanings, such as 'whereby', can give rise to interpretational difficulties as seen in *Imperial Chemical Industries v Montedison (UK) Ltd*, 88 where the word was construed in three different ways to mean that the article in issue where by a particular result was achieved could be the sole cause, the dominant cause or the contributory cause for such a result. But the mere fact that the same word was repeated twice in the same claim will not be a cause for attributing different meanings. 99

(H) Numbers

6.67 When words have been given a purposive construction, a question arises whether numbers, quantities and numerical ranges would also be similarly construed. The issue in *Catnic*, whether the word 'vertical' is to be interpreted literally as exactly vertical (ie, 90 degrees from the base), or purposefully as meaning nearly vertical enough to hold what is above, would not have been decided differently had the phrase vertical been replaced with numbers (ie, angle of incline). The *Catnic* approach has been followed in various cases involving numerical ranges.

6.68 In the case of a patent involving a method of manufacturing plastic nettings with junctions having 'a minimum thickness not less than 75 percent of the thickness of the mid-point of any of the strands passing into the junction', it was observed that the defendant's junctions which had an average thickness between 60 percent to 72 percent would have infringed the plaintiff's patent if the product has differed with the patented product

⁸⁷ Minnesota Mining & Manufacturing Co's (Suspension Aerosol Formulation) Patent (1999) RPC 135, p. 143.

⁸⁸ Raleigh Cycle Co Ltd v H Miller & Co Ltd [1948] 1 All ER 308, pp 321, 323, (1948) 65 RPC 141, pp 157, 160 (HL); Daikin Kogyo Co Ltd (Shingus) Application (1974) RPC 559 (CA).

⁸⁹ Daikin Kogyo Co Ltd (Shingu's) Application (1974) RPC 559 (CA). See also Lancer Bros Ltd v Henry Forklift Co Ltd (1975) RPC 307; Rotocrop International Ltd v Genbourne Ltd [1982] FSR 241, p 254.

⁹⁰ Rose Street Foundry and Engineering Co Ltd v India Rubber, Gutta Percha and Telegraph Works Co Ltd (1929) 46 RPC 294, p 305 (CA); Cincinnati Grinders Inc v BSA Tools Ltd (1930) 48 RPC 33, p 69 (CA).

⁹¹ Submarine Signal Co & Submarine Signal Corpn v Hughes & Son (1931) 49 RPC 149; Mullard Radio Valve Co Ltd v Philco Radio and Television Corpn (1935) 52 RPC 261 (CA).

⁹² Furr v Truline (building) [1985] FSR 553, p 555.

⁹³ Visx Inc v Nidek Co Ltd [1999] FSR 405, p 426.

⁹⁴ Insituform Technical Services v Inliner UK (1991) RPC 83, pp 95-96.

⁹⁵ Bühler AG v Satake UK Ltd (1997) RPC 232, p 239.

⁹⁶ PCME v Goyen Controls [1999] FSR 801, p 809.

⁹⁷ See Catnic Components Ltd v Hill & Smith Ltd (1982) RPC 183, [1981] FSR 60 (HL).

^{98 (1995)} RPC 449 (CA).

⁹⁹ Palmaz's Patents (1999) RPC 47.

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^{98 (1995)} RPC 449 (CA).

⁹⁹ Palmaz's Patents (1999) RPC 47.

only in that respect.¹ Like words, numbers are capable of being used generally or specifically. In *Auchincloss v Agricultural & Veterinary Supplies Ltd*,² it was observed:

Where the patentee has expressed himself in terms of a descriptive word or phrase there may be room for supposing that he was using language figuratively, and did not intend to restrict himself to the purely literal meaning. But where the patentee has defined an integer of his claim in terms of a range with specified numerical limits at each end, his purpose must be taken to have been to claim thus far and no further.

6.69 Where the patentee had given the ratio in two significant figures, it would mean that the patentee was indicating that only those two figures were significant.³ Numbers, like words, shall be construed contextually. Decimals expressed with one significant figure (eg 1.3) will be construed applying scientific convention as '1.3 to two significant figures'. In *Lubrizol Corpn v Esso Petroleum*, 'at least 1.3' was construed as meaning anything below 1.30 such that 1.28 and 1.29 would not fall within the ambit of the claim.⁴ The High Court of Malaya, applying the *Catnic* principle held that a product with 5 percent of ethephon caught up with a claim limited to an aqueous composition of 4.8 percent (or less) of ethephon.⁵ A range of '31 percent to 35 percent' was construed to include ranges of 'the specified number to two significant figures, so including 30.5 percent to 35.4 percent, or 30.50 percent to 35.49 percent, or 30.500 percent to 35.499 percent'.⁶

(I) Chemical Formulae

6.70 A claim need not be confined to the chemical formula used in the patent. Chemical formulae will be interpreted as understood by a person skilled in the art. It is not clear whether chemical formulae will be construed broadly as it could lead to insufficiency if the compounds of the claim do not have the properties they are said to have.⁷

CHAPTER 7

Patent Application

Synopsis	
Introduction	181
PERSONS WHO CAN APPLY	183
REQUIREMENTS OF AN APPLICATION	193
Types of Patent Applications	196
PUBLICATION AND EXAMINATION	208
Secrecy of Inventions	.225

Introduction

7.1 Before filing a patent application, the inventor must ascertain whether the invention is patentable under the Patents Act or not. Once a patentable invention is identified and before any disclosure is made, the crucial decision as to whether a patent application should be filed has to be taken. There would definitely be situations where it is not appropriate to make a patent application. For instance, if the objective of the inventor is not to get a monopoly and to exclude others from using the invention, the inventor may publish the invention immediately. This would not only give her the credit of the invention but will also prevent others from obtaining a patent for such an invention. Another instance involves inventions of such nature where it would be difficult to detect and prove infringement. Patenting such inventions would ultimately lead only to disclosure of vital information and prosecuting such infringements would be an arduous task. The inventor shall also take into account other alternatives, such as protecting the

¹ PLG Research Ltd v Ardon International Ltd [1993] FSR 197, p 217, per Aldous J.

^{2 (1997)} RPC 649, p 689.

³ See Lubrizol Corpn v Esso Petroleum (1998) RPC 727, p 748.

⁴ Ibid.

⁵ Rhone-Poulenc AG v Dikloride Herbicides [1988] FSR 282, p 290 (HC) (Mal).

⁶ Halliburton Energy Services Inc v Smith International (North Sea) Ltd [2005] EWHC 1623, para 91.

⁷ See Pharmacia Corpn v Merck & Co Inc (2002) RPC 41 (CA). See also the discussion on 'single inventive concept', para 6.57.

¹ See para 2.13 onwards.

inventions as confidential information or through other forms of intellectual property rights.

- 7.2 The decision as to when a patent application has to be filed and where such an application is to be made depends on the patent strategy of the inventor. Where the invention is to be sold and used in more than one country, an international application (a convention application or a PCT application) would be the preferable route. Once an international application is made, it gives the invention priority from the date of the application. The patentee then has more than a year to file the individual applications in other countries. This would give the patentee enough time to test the commercial and inventive worthiness of the product. If a decision is made, within one year after filing the international application, that the invention is not worthy of being patented, the application can be abandoned. Alternatively, if the decision is to file patent applications in several other countries, the international application can be relied upon for the purpose of priority and the invention would have the priority date of the international application.
- 7.3 Like India, most jurisdictions encourage the patent application to be made as soon as the invention is identified. This is known as the first-to-file system for granting patents. Amongst the important jurisdictions, United States stands as a lone exception as a country which follows the first-to-invent system for grating patents. An application for a patent can be made in anticipation of an invention. But it would be safer to test and try the invention before the first application is made. The Patents Act contains various provisions for opposing and challenging a patent before and after its grant. Care should be taken to check whether the patent is capable of being worked and commercially exploited, as the patent can be challenged on these grounds.
- 7.4 It is important for the applicants not to publish their inventions before approaching the patent office, as publication of the invention, even by the inventor himself, will constitute a bar for patenting it in most cases. Even public use of the invention may be raised as an objection to the grant of a patent. The Patents Act, however, protects secret working of the invention for the purpose of research and trial. It is also important for the applicants not to wait till the inventions are fully developed for commercial working. As the Patent Office follows the first-to-file system, any delay in approaching the Patent Office may result in another inventor applying for a patent or increase the risk of inadvertent publication. The best recourse for the inventor will be to file a provisional specification as soon as practicable.

7.5 Every application for patent shall be made in Form 1 of Second Schedule to the Patents Rules 2003 and shall relate to only one invention. Broadly, an application for the grant of a patent in India can be done in two ways; the application can either be made directly to the Indian Patent Office under the Patents Act or indirectly by filing an application under the Patent Cooperation Treaty (PCT).²

(A) Provisions under the Patents Act 1970

7.6 Chapter III of the Patents Act, which comprises of ss 6 to 11, deals with applications for patents. The corresponding rules are contained in rr 10 to 16 of the Patents Rules 2003. Chapter IV of the Patents Act, which comprises of ss 11A to 21, deals with publication and examination of applications. The corresponding rules are contained in rr 24 to 38. Chapter VII (ss 35 to 42) deals with the provisions for secrecy of certain inventions. Chapter IX (ss 54 to 56) deals with patents of addition. Chapter XXI, which comprises of ss 133 to 139, deals with Convention and PCT applications. Rules 17 to 23 deal with international applications under the PCT.

(B) Comparative Provisions

7.7 Sections 14 to 16 of the UK Patents Act deal with patent application. Sections 17 to 21 deal with examination and search. The UK Patents Act has introduced elaborate provisions on employee's inventions which were not there under the UK Patents Act 1949. These are contained in ss 39 to 54. The provisions on international applications for patents are contained in ss 89 to 89B.

PERSONS WHO CAN APPLY

- 7.8 An application for patent for an invention may be made, either alone or jointly with any other person, by any of the following persons:
 - (i) any person claiming to be the true and first inventor of the invention; or
 - (ii) any person who may be the assignee of the true and first inventor; or
 - (iii) the legal representative of any deceased person who was entitled to make the application immediately before his death.³

² For details on the different types of application, see para 7.45 onwards.

³ Patents Act 1970, s 6.

An international application under the PCT can be filed before the Indian Patent Office. The expression 'applicant' is defined in the PCT in a similar way to include the agent or other representative of the applicant. The applicant must be a resident or a national of a Contracting State to the PCT.

(A) 'True and first' Inventor

7.9 The Patents Act does not define the expression 'true and first inventor'. It merely excludes the first importer of an invention into India, and a person to whom an invention is first communicated from outside India, from the ambit of the expression. The UK Patents Act, however, does define the inventor as 'the actual deviser of the invention'. This would mean a person who first made the invention and who had first applied for the patent. A person will not be regarded as an inventor merely because he contributes to the claim. An inventor is a person who contributes to the formulation of the inventive concept. An antecedent worker, who comes up with or communicates the idea consisting of all the elements of the claim, even though it is just an idea at that stage, would qualify for an inventor.

7.10 The Patents Act requires the true and first inventor to be a natural person. Many of the forms in second schedule to the Patents Rules require the disclosure of the name of the natural person who has signed them. ¹¹ This requirement is equivalent to the disclosure of the name of the 'true and first inventor'. Juristic entitles like corporations, institutions and companies can, at best, be an assignee or a joint applicant along with the true and first inventor.

7.11 As the Patents Act follows the first-to-file system, in cases where two persons simultaneously make the same invention and neither of them uses or discloses the invention prior to making the application, the person who first applies for the patent will be considered as the 'true and first inventor' even if the other would have actually made the invention prior in time. The first-to-file system is based on the reasoning that the person who files the application first makes a contribution to the public by showing them

how to practice the invention. ¹² Thus, a patent is granted under the Patents Act to a person who approaches the Patent Office first for a patent. The grant confers an exclusive right to monopolise the invention which is given in lieu of the disclosure of the invention. So, the disclosure made to the Patent Office is a condition that entitles one for a grant. This puts a person, who may have made the invention first but did not approach the Patent Office with an application for grant, in a position where it would be difficult to prove himself as the 'true and first inventor', except in cases where the invention is wrongfully obtained from him.

7.12 For this reason, the patent is granted to the person who finds out 'something which has not been found out by other people'. The person to whom an idea occurred will not be the true and first inventor, unless he had also reduced the idea to a definite and practical shape. The name of the true and first inventor shall be disclosed in every application. Where the applicant is not the true and first inventor, the application shall contain a declaration that the applicant believes the person so named to be the true and first inventor.

(i) Identifying the Inventor

7.13 On the issue of identifying the inventor, the British courts have held that it is essential to identify the inventive concept of the claims first and then to see who was responsible for it or who devised it. ¹⁶ Inventive effort or intellectual contribution to the invention is the criterion for determining whether a person is a true and first inventor. Financial or material contribution, however, shall not entitle a person to be a true and first inventor. A partnership firm or a corporate entity, for this reason, cannot be the sole applicant claiming to be the inventor. ¹⁷ But a firm or a company may be registered as a joint patentee along with the first and true inventor.

⁴ Patents Rules 2003, r 18.

⁵ Patent Co-operation Treaty Rules, r 2.1.

⁶ Patent Co-operation Treaty, art 9(1).

⁷ Patents Act 1970, s 2(1)(y).

⁸ UK Patents Act 1977, s 7(3).

⁹ University of Southampton's Applications [2004] EWHC 2107 (Pat), (2005) RPC 11, para 39.

¹⁰ Stanelco Fibre Optics Ltd's Applications [2004] EWHC 2263, (2005) RPC 15, para 14.

¹¹ See, for instance, Patents Rules 2003, Forms 13 and 14.

¹² See Canadian General Electric Co Ltd v Fada Radio Ltd AIR 1930 PC 1, p 5, [1930] AC 97, p 103, (1930) 47 RPC 69; Bombay Agarwal Co Akola v Ramchand Diwanchand AIR 1953 Nag 154, pp 162-3.

¹³ Pope Appliance Corpn v Spanish River Pulp and Paper Mills Ltd [1929] AC 269, p 280, AIR 1929 PC 38, p 43, (1929) 46 RPC 23.

¹⁴ Permutit Co v Borrowman (1926) 43 RPC 356, p 359, [1926] 4 DLR 285.

¹⁵ Patents Act 1970, s 7(3).

¹⁶ Henry Brothers (Magherafelt) Ltd v Ministry of Defence and Northern Ireland Office (1997) RPC 693, p 706 (Pat Ct), (1999) RPC 442, p 448 (CA). In the above case, the patent was for prefabricated blast-resistant building structures. Before the Patents Court, the applicant made a claim for compensation for Crown use under ss 55 to 58 of UK Patents Act 1977. The court ordered revocation of the patent on the ground that 'the patent was granted to a person who was not entitled to be granted that patent'. See also Stanelco Fibre Optics Ltd's Applications [2004] EWHC 2263, (2005) RPC 15, para 12; Minnesota Mining and Manufacturing Co's International Patent Application (2003) RPC 541.

¹⁷ VB Mohammed Ibrahim v Alfred Schafranek AIR 1960 Mys 173, p 175.

7.14 A person making a suggestion, such as a claim limitation, having no substantial bearing on the inventive concept, will not be regarded as a joint inventor. Similarly, a person who adds common general knowledge of those in the art to the inventor's idea cannot be regarded as an inventor.

(B) Assignee

7.15 As the right to apply is an assignable right, the assignee of the true and first inventor may also apply for the patent. There is no restriction as to who may be an assignee; even a foreigner can be an assignee. An assignee can either be a natural person or a legal person such as a registered company, research organisation, educational institution or government. Though assignments are usually done in writing, the Patents Act or the Patents Rules do not preclude an oral assignment. No procedural formalities are stipulated under the Patents Act for an assignment to be valid. Where the application is made by an assignee of the true and first inventor, every application must contain a declaration by the applicant stating, among other things, the following:²²

- (1) that the applicant is in possession of the invention;
- (2) that there is no lawful ground of objection to the grant of the patent to the applicant; and
- (3) that the applicant is the assignee or legal representative of the true and first inventor.
- 7.16 The assignee should also furnish the proof of the right to make the application either along with the application, or within a period of six months after the filing of such application.²³ The above six-month period in case of an application corresponding to an international application designating India shall be calculated from the actual date on which the application is filed in India.²⁴ The assignee has to state the name of the true and first inventor. Any application made without making the true and first inventor a party is void. Such an omission cannot be cured by amendment.²⁵

7.17 A company or a firm may also apply for a patent as the assignee of the true and first inventor. Though a body corporate does not have the capacity to invent, the rights of the true and first inventor may be assigned to it. As stated above, a person entitled to apply for a patent under the Patents Act includes the government. But a member of an official commission or committee investigating into the patent cannot take out a patent for the results of an official investigation belonging absolutely to the state. But a member of an official investigation belonging absolutely to

(C) Legal Representative

7.18 The right to apply for a patent is a continuing right which will pass on to the legal representatives of the any deceased person who was entitled to make such an application. A legal representative is a person who in law represents the estate of a deceased person.²⁹ The legal representative should file the death certificate and other documents as proof of right.

(D) Mention of Inventor

7.19 An application should state that the person making the application is in possession of the invention and also mention the name of the inventor. The application for grant may be made in the joint names of the employer and the employee; in such cases the employee may be entitled to compensation. Usually, the employer will apply for the grant of the patent in its own name. The employer (applicant) shall disclose the name of the true and first inventor and shall make a declaration that he believes the person so named to be the true and first inventor.

7.20 Section 28 of the Patents Act provides for a mechanism by which the inventor may secure his right to be identified with the invention. If the Controller is satisfied, by a request or a claim made before him:

(a) that the person in respect of or by whom the request or claim is made is the inventor of an invention in respect of which application for a patent has been made, or of a substantial part of that invention; and

¹⁸ Stanelco Fibre Optics Ltd's Applications [2004] EWHC 2263, (2005) RPC 15, para 15A.

¹⁹ University of Southampton's Applications [2006] EWCA Civ 145, (2006) RPC 21, para 39.

²⁰ See Patents Act 1970, s 2(1)(ab). An assignee includes an assignee of the assignee and the legal representative of a deceased assignee.

²¹ But the applicant must be a national of India or of a convention country.

²² Patents Rules 2003, Form 1.

²³ Patents Act 1970, s 7(2); Patents Rules 2003, r 10.

²⁴ Patents Rules 2003, r 10.

²⁵ See Edward Carter's Application (1932) 49 RPC 403. In this case, the application was made by the nominee of the inventor.

²⁶ Shining Industries v Shri Krishna Industries AIR 1975 All 231, p 234.

²⁷ Patents Act 1970, s 2(1)(s).

²⁸ Patterson v Gaslight and Coke Co (1875-76) LR 2 Ch D 812, pp 832-833 (CA).

²⁹ Patents Act 1970, s 2(1)(k).

³⁰ See UK Patent Act 1977, ss 40 and 41, which provides for compensation to the employee.

³¹ Patents Act 1970, s 7(3).

(b) that the application for the patent is a direct consequence of his being the inventor,

the Controller shall cause such person to be mentioned as inventor in any patent granted in pursuance of the application in the complete specification and in the register of patent. However, such a mention of any person as the inventor shall not confer or derogate from any rights under the patent.

7.21 The Controller is empowered, upon a request or claim made to him, to cause the inventor's name to be mentioned in any patent granted as well as in the register of patents, in the manner mentioned in r 70.³² A request for the inventor's name to be mentioned shall be made in Form 8 either by the applicant (where the applicant is the inventor) or jointly by the applicant and the inventor (where the applicant is not the inventor). If any other person desires to be mentioned as the inventor, a claim shall be made to that effect in Form 8. Such a request or claim shall be made before the grant of the patent.³³

7.22 When a request or a claim is made under s 28, the Controller shall give notice to every applicant and interested persons and give opportunity to hear the persons concerned before deciding the request or claim. The Controller shall follow the same procedure as in the case of opposition proceedings. ³⁴ Section 28 provides for special powers for rectification of the register in cases where a person who ought not to have been mentioned as the inventor has been mentioned as one. Any person may apply to the Controller for a certification of rectification, which may be granted after hearing the interested persons. Upon the issue of such a certificate, the specification and the register shall be rectified accordingly. ³⁵ A proceeding under s 28 confers a special power on the Controller to rectify the register consequent to a request or a claim being made in accordance with that section. The general power of rectification of register vests with the Appellate Board. ³⁶

(E) Entitlement Disputes

7.23 As stated above, a proceeding under s 28 of the Patents Act will not confer or take away any rights under the patent. It merely acknowledges the right of an inventor to be identified with his invention. Disputes with regard to entitlement of a patent or a share or an interest in a patent shall

be decided by a competent court.³⁷ Entitlement disputes with regard to a patent application which arises at any time before the patent is granted shall be decided by the Controller in accordance with s 20 of the Patents Act. The Controller also has powers to give directions to co-owners.³⁸

(i) Disputes Before the Grant of a Patent

7.24 Entitlement disputes which arise under the Patents Act at any time before the grant of a patent are decided by the Controller under s 20. For further details, see para 7.112.

(ii) Disputes After the Grant of a Patent

7.25 Disputes after the grant are dealt with by a combination of procedures. The Patents Act confers power on the Controller to take notice of a change in title to a patent.³⁹ But where there is any dispute with regard to the title or interest in a patent, the rights of the parties have to be decided by a competent court.⁴⁰ As the rules of law applicable to the ownership and devolution of moveable property shall apply in relation to patents,⁴¹ disputes with regard to title or interest over patents may be settled by a suit for declaration under s 34 of the Specific Relief Act 1963.⁴²

(a) Disputes between Employers and Employees

7.26 Inventions are normally made by employees during the course of their employment with a company or an organisation. It is preferable for the inventor to clarify his rights with reference to his employers, co-workers, contractors and assistants who may be involved, in some manner, with the development of the invention, before filing the patent application. The common law on the point, pertaining to cases where there are no specific agreements clarifying the rights, indicates diverse findings as to who should be the owner of the invention. On the one hand, there are decisions which show that employees are not trustees of their employers and as such the inventor will be entitled to retain his interest in the invention as against the company. ⁴³ On the other hand, the courts have held that the contractual

³² Patents Act 1970, s 28(1).

³³ Ibid, s 28(4).

³⁴ Ibid, s 28(6); Patents Rules 2003, r 69.

³⁵ Ibid, s 28(7).

³⁶ Ibid, s 71. For details, see para 12.41 onwards.

³⁷ Patents Act 1970, s 69(3).

³⁸ Ibid, s 51. For details, see para 9.22 onwards.

³⁹ Ibid, s 69.

⁴⁰ Ibid, s 69(3).

⁴¹ Ibid, s 50(5).

⁴² See para 17.29 for s 34 of the Specific Relief Act 1963. A suit for declaration may be brought if any person is entitled to any right in any property which is denied by another person.

⁴³ See Selz's (Charles) Appln (1954) 71 RPC 158, p 164.

relationship will be decisive in determining to whom the invention belongs, even if not expressly provided for.⁴⁴

7.27 An employer can bring in an action for declaration that the invention made by the employee during the period of employment belonged to the employer. If the employee has obtained the patent in his own name under circumstances that would render him a trustee, the employer is entitled for an order assigning the patent to him. 45 Under British law, the employer may also apply for revocation of the patent granted to the employee, within two years of the grant, and make a fresh application. 46 The employer may also apply for the patent on behalf of the employee for those inventions made by the employee in the course of employment. 47 Where the employee refuses to sign the necessary declarations in the patent application, an order may be obtained for making the employee sign the declarations and in default a person named can sign as the agent of the employee. 48

7.28 The remedy of declaration is also open to the employee for a declaration that he is the first and true inventor of a patent. 49 Since such a relief serves only a limited purpose of identifying the inventor and does not give any right over the patent, such actions are far and few.

7.29 In the United Kingdom, disputes with regard to inventorship are settled by entitlement proceedings. Entitlement proceedings between an employer and employee with regard an invention are now governed ss 39 to 43 of the UK Patents Act which embody the principles hitherto decided by application of common law. ⁵⁰ To what extent the provisions are declaratory of common law is not clear. ⁵¹ Section 39(1) of the UK Patents Act reads:

39 Right to employees' inventions.—(1) Notwithstanding anything in any rule of law, an invention made by an employee shall, as between him and his employer, be taken to belong to his employer for the purposes of this Act and all other purposes if-

(a) it was made in the course of the normal duties of the employee or in the course of duties falling outside his normal duties, but specifically assigned to him, and the circumstances in either case were such that an invention might reasonably be expected to result from the carrying out of his duties; or

(b) the invention was made in the course of the duties of the employee and, at the time of making the invention, because of the nature of his duties and the particular responsibilities arising from the nature of his duties he had a special obligation to further the interests of the employer's undertaking.

(b) Normal Duties of Employee

7.30 An invention made by an employee in the course of his normal duties would belong to the employer if such an invention would have been reasonably expected from carrying out the duties. In interpreting the expression 'normal duties', the question that had to be considered was whether designing and inventing formed a part of the employee's duties. In Harris' Patent, 52 the Patents Court considered the first condition in s 39 of the UK Patents Act, and accepted the contention that if the employee makes an invention by applying his mind to problems experienced by his employer and if part of his duty is to apply his mind to those problems, then that set of circumstances are covered by s 39(1)(a) of the UK Patents Act. 53 In Greater Glasgow Health Board's Application, 54 the Patents Court again considered the meaning of the expression 'normal duties' in a case where an invention (an optical spacing device for use with an indirect ophthalmoscope) was made by a doctor during his employment as the Registrar in the Department of Ophthalmology. The court, in holding that the invention was not made in the course of the Registrar's normal duties, observed that it would be incorrect to assume that doctor's primary

⁴⁴ See Anemostat (Scotland) Ltd v Michaelis (1957) RPC 167, where on the facts of the case it was held that the company was not the owner of the patent and had no beneficial interest in it; British Syphon Co Ltd v Homewood (1956) RPC 225, [1956] 1 WLR 1190, pp 1192-93, where on the fact of the case, the court ordered the inventor to assign all his interest to his employer in the application for patent on the ground that it would in inconsistent with a relationship of good faith between a master and a technical adviser for the inventor to retain the invention made in the course of his employment.

⁴⁵ Barrington Products (Leicester) Ltd v King (1958) RPC 212, p 214.

⁴⁶ See UK Patents Act 1977, s 37(5).

⁴⁷ Forte v Martinez (1947) 64 RPC 26. The plaintiffs were allowed to make an application for patent on behalf of the defendant with whom they had an agreement for the disclosure of inventions, as the defendant fell outside the jurisdiction.

⁴⁸ Loewy Engineering Co Ltd Appln (1952) 69 RPC 3.

⁴⁹ Patents Act 1970, s 28.

⁵⁰ See the UK Patents Act 1977.

⁵¹ See *Harris' Patent* (1985) RPC 19, p 28. Justice Falconer compares s 39(1)(a) of the UK Patents Act 1977 with the principles of common law but does not come to any conclusion as to whether it is declaratory of common law.

^{52 (1985)} RPC 19, per Falconer J.

⁵³ Ibid, p 37. In this case, it was held that the invention was not made in the course of the inventor's normal duties nor was it made in circumstances such that an invention might reasonably be expected to have resulted from his carrying out his normal duties.

^{54 (1996)} RPC 207.

duty of treating patients extended to devising new ways of diagnosing and treating patients. The expression 'normal duties' will also include subtle variations to the terms of the initial written contract of employment, as a contract can be expected to evolve in the course of time. ⁵⁵

(c) Special Obligation

7.31 In Harris' Patent, ⁵⁶ the court also considered the second condition of s 39 of the UK Patents Act which pertains to special obligation. The section states that the invention should be made in the course of the duties of the employee and that such duties gave rise to a special obligation to further the interest of the employer. Justice Falconer, after considering Mr Harris's employment as a manager in Reiss Engineering, held:⁵⁷

It seems to me that, having regard to his status and the nature of his duties and responsibilities, as they were in fact under that status, the obligation which he had by reason of the nature of his duties and particular responsibilities arising therefrom was no more than to do the best he could to effect sales of the Wey valves which Reiss Engineering sold, valves made by Sistag or strictly to Sistag's drawings, and to ensure to customers after sales service of valves supplied. Beyond that obligation, in my judgment, he had no special obligation to further the interests of Reiss Engineering's valve business. Accordingly, I hold that Mr Harris's invention is not one falling within para (b) of s 39(1).

The legal provisions cited above and the judicial decisions on the subject would indicate that entitlement disputes pertain more to aspects of contract law than patent law. Yet, it would be a welcome change to have the Indian law codified in the Patents Act in the above lines. Needless to say, the Indian law with regard to entitlement disputes between the employer and employee is based on common law. Such codification will bring in certainty especially in this area where there are diverging, if not conflicting, decisions of the British courts.

(d) Breach of Confidence

7.32 A person who claims entitlement of another's patent application or a part of it must show that he is entitled to it by contract or by breach of

confidence.⁵⁸ It would be preferable to bring common proceedings for entitlement and breach of confidence. It has been observed that entitlement disputes, if fully fought, could lead to protracted, expensive and emotionally draining proceedings. A better course would be to settle such disputes by mediation or arbitration or by a combination of both.⁵⁹

REQUIREMENTS OF AN APPLICATION

7.33 An application for a patent has to be filed in the appropriate patent office within whose territorial limits the applicant has his place of residence, domicile or business. ⁶⁰ In the case of a joint application, the whereabouts of the first mentioned applicant shall be taken into account in determining the appropriate patent office. An application can also be filed in the office within whose territorial limits the invention originated. If the applicant has no place of business or domicile in India, then the appropriate patent office will be the one within whose territorial limits the address of service in India furnished by the applicant is situated. ⁶¹ An applicant may also furnish his patent agent's address as the address for service of documents.

7.34 An application for patent shall be made in duplicate, in Form 1, and by paying the prescribed fee. The application should be accompanied by the following documents, which are discussed below in detail:

- (1) Provisional or complete specification⁶² and drawings, if any, in duplicate;⁶³
- (2) Statement and undertaking regarding foreign filing details in respect of the same invention;⁶⁴
- (3) Declaration as to inventorship;⁶⁵
- (4) Priority document in the case of a convention application;⁶⁶

⁵⁵ See Liffe Administration and Management v Pinkava [2007] EWCA Civ 217, [2007] All ER (D) 258 (Mar).

^{56 (1985)} RPC 19.

⁵⁷ Ibid, pp 40-41.

⁵⁸ See Markem Corpn v Zipher Ltd (2005) RPC 31 (CA). See also University of Southampton's Applications [2006] EWCA Civ 145, (2006) RPC 21, para 8.

⁵⁹ See University of Southampton's Applications [2006] EWCA Civ 145, (2006) RPC 21, para 44, where the court refers to the use of a process called 'medarb', which combines mediation and arbitration, by which a mediator trusted by both sides is given the authority to decide the terms of a binding settlement agreement.

⁶⁰ See para 12.2 for details about the appropriate office.

⁶¹ Patents Rules 2003, r 4.

⁶² Patents Act 1970, ss 9 and 10; Patents Rules 2003, Form 2.

⁶³ Patents Rules 2003, rr 13 and 15.

⁶⁴ Patents Act 1970, s 8(1); Patents Rules 2003, r 12 and Form 3.

⁶⁵ Patents Rules 2003, Form 5.

⁶⁶ Patents Act 1970, s 138.

(5) Power of attorney where the application is made through a patent agent; 67

(6) Proof of right if the application is made by the assignee.⁶⁸

(A) Specification

7.35 The provisional specification is the document filed before the Patent Office which first discloses the patent. An applicant may choose to file a provisional specification when he feels that the invention has reached a presentable form. By preferring the provisional specification which describes the invention, the applicant gets priority over any other person who is likely to file an application with regard to the same invention. As the Patent Office follows the first-to-file system, the promptness in filing the provisional specification can be crucial in obtaining a patent. On the receipt of the provisional specification, the Patent Office accords a filing date for the application. From then on, the applicant has 12 months for filing the complete specification along with a declaration as to inventorship. For further details on provisional and complete specification, see ch 5.

(B) Statement and Undertaking Regarding Foreign Applications

7.36 In cases where the applicant for a patent under the Patents Act is prosecuting either alone or jointly with any other person an application for a patent in any country outside India in respect of the same or substantially the same invention, or where to his knowledge such an application is being prosecuted by some person through whom he claims or by some person deriving title from him, he shall file, along with his application, or within six months from the date of filing, a statement and an undertaking as prescribed in Form 3.⁷⁰ If there is no such foreign application, the applicant shall file a statement to that effect.

7.37 The statement shall set out the detailed particulars of such application including the name of the country, application number and status of such application. The undertaking given by the applicant shall state that, up to the date of the grant of his complete specification filed in India, the applicant would keep the Controller informed in writing, from time to time, the detailed particulars as required under cl (a) of s 8(1) of the Patents Act in

respect of every other application relating to the same or substantially the same invention, if any, filed in any country outside India subsequently to the filing of the statement referred to in the aforesaid clause, within six months of such filing.

7.38 At any time after an application for patent is filed in India and till the grant of patent or refusal to grant of patent is made, the Controller may also require the applicant to furnish details as may be prescribed relating to the processing of the application in a country outside India, and the applicant shall furnish information available to him to the Controller within six months from the date of receipt of the communication requiring such furnishing of information. In case of delay in furnishing the details beyond six months, the applicant may seek for further extension of time by filing a petition under r 138. When the Controller requires such information under s 8(2) of the Patents Act, the applicant shall furnish information pertaining to objections, if any, in respect of novelty and patentability of the invention and any other particulars as the Controller may require which may include claims of application allowed within six months from the date of such communication by the Controller.

(C) Declaration as to Inventorship

7.39 The applicant has to make a declaration as to inventorship in Form 5 showing the name, nationality and address of the true and first inventor. Such a declaration is not required in the case of an ordinary application filed along with the complete specification. However, a declaration is needed in case of a Convention application, a PCT National phase application and where the complete specification is filed after the provisional specification is made.⁷³

(D) Priority Document for Convention Applications

7.40 The priority document for a convention application made in accordance with ch XXII of the Patents Act refers to the copies of the specifications or corresponding documents filed or deposited by the applicant in the patent office of the convention country as referred to in s 133 of the Patents Act and verified to the satisfaction of the Controller.⁷⁴

⁶⁷ Patents Rules 2003, r 135(1) and Form 26.

⁶⁸ Patents Act 1970, s 7(2); Patents Rules 2003, r 10.

⁶⁹ Patents Rules 2003, Form 5.

⁷⁰ Patents Act 1970, s 8(1); Patents Rules 2003, r 12(1A).

⁷¹ Patents Act 1970, s 8(2); Patents Rules 2003, r 12(2).

⁷² Patents Rules 2003, r 12(3).

⁷³ Patents Act 1970, s 10(6); Patents Rules 2003, r 13(6).

⁷⁴ Ibid, s 138(1).

The applicant shall furnish the above documents in addition to the complete specification. If the priority documents are in a foreign language, a translation in English verified by affidavit shall be furnished when required by the Controller. The priority date shall be the date on which the application was made in the convention country.

(E) Representation through a Patent Agent

7.41 The proof of representation by a patent agent or an advocate shall be by filing an authorisation under Form 26 or in the form of a power of attorney.⁷⁷

(F) Proof of Right

7.42 Section 7(2) requires proof of right to file the application in cases where the application is made by virtue of an assignment of the right to apply. The applicant can produce the proof of right to apply either in the body of the application by means of an endorsement in Form 1 or by way of separate assignment deed. Where the applicants are the legal representatives of the deceased, the death certificate should be filed as proof of right. The time stipulated for filing the proof of right is six months from the date of application.⁷⁸

Types of Patent Applications

7.43 A patent application shall pertain to only one invention. ⁷⁹ A complete specification shall relate either to a single invention or to a group of inventions linked so as to form a single inventive concept. ⁸⁰ The expressions 'single invention' and 'single inventive concept' are not defined in the Patents Act. A single patent may be granted for cognate inventions, if the Controller is satisfied that there is a sufficiently close relationship between the inventions. ⁸¹ With regard to chemical products, claims to intermediate and final chemical products have been held as not relating to a single inventive concept; but the same would be regarded as a single inventive

concept if the intermediaries and the final products have a common structural element, providing the necessary technical interconnection for the existence of unity 82 or if the intermediaries contribute to address a unitary overall problem. 83

7.44 The guidelines released by the Patent Office provide further clarification on how an application for single invention will be dealt with. Where the subject matter of the application does not constitute one invention or a group of inventions so as to make a single invention, the application should be divided into separate applications. The Controller may also reject the application on the ground that the application pertained to more than one invention, if the applicant fails to amend the application. But no person shall take any objection to a patent on the ground that it has been granted for more than one invention. Nor shall the validity of a patent of addition be questioned on the ground that the invention ought to have been the subject matter of a separate patent.

7.45 The different types of patent applications that can be made with regard to an Indian patent are as follows:

- (1) Ordinary application under s 7.
- (2) Convention application under s 135.
- (3) PCT international application under the PCT.
- (4) PCT national phase application under s 7(1)(A).
- (5) Application for patent of addition under s 54.
- (6) Divisional application under s 16.

The different types of applications are discussed in detail in the following sections.

(A) Ordinary Application: Section 7

7.46 The first application for patent made in Patent Office without claiming any priority of application made in a convention country or without any reference to other application under process in the office is called an

⁷⁵ Patents Act 1970, s 138(2).

⁷⁶ Ibid, s 138(3). For priority of applications, see para 5.47 onwards.

⁷⁷ Patents Act 1970, ss 127 and 132; Patents Rules 2003, r 135(1).

⁷⁸ Ibid, r 10.

⁷⁹ Patents Act 1970, s 7(1).

⁸⁰ Ibid, s 10(5).

⁸¹ See Merck & Co (Arth's) Application (1973) RPC 220, p 225, [1973] FSR 165, p 171.

⁸² T110/82 BAYER/Benzyl Esters [1979-85] EPOR B546; T57/82 BAYER/Copolycarbonates [1979-85] EPOR B474.

⁸³ T470/91 ICI/Unity [1994] EPOR 231.

⁸⁴ See Manual of Patent Practice and Procedure, Patent Office.

⁸⁵ Patents Act 1970, s 15. See Mobil Oil Corpn Application (1969) RPC 586, [1969] FSR 347, p 354.

⁸⁶ Ibid, s 46(2). See Illinois Tool Works Inc v Autobars Co (Services) Ltd [1972] FSR 67, (1974) RPC 337.

⁸⁷ Ibid, s 56(1).

ordinary application. ⁸⁸ An application shall be made in Form 1 and filed in the Patent Office along with the prescribed fee. ⁸⁹ Every application shall be made along with the provisional or complete specification, drawings, priority documents, statement and undertaking, power of attorney and declaration of inventorship. ⁹⁰

(B) Convention Application: Section 135

7.47 Article 4 of the Paris Convention for the Protection of Industrial Property 1883 allows an applicant who has filed an application for a patent in one of the Convention countries a right to priority based on the basic application first filed in the convention country. An application filed before the Patent Office claiming a priority date based on the basic application is known as a convention application. Papplication for a patent in India operates on the principle of reciprocity. Countries which do not accord to Indian citizens the same rights in respect of the grant of patents and protection of patent rights as it accords to its own nationals, can be notified by the Central Government in the Official Gazette. The nationals of such countries shall not be entitled, either solely or jointly, to apply for a grant of patent or to be registered as the proprietor. They are also precluded from being registered as an assignee or to apply or hold any licence.

7.48 Section 135 gives the applicant in India the benefit of priority by dating the claim of the applicant to the date when the applicant may have made an application in a convention country. To avail the benefit of convention priority, the applicant must satisfy the following conditions: 94

- (a) The applicant should have made an earlier application for a patent in a convention country (known as the basic application);
- (b) An application for the patent in India has to be made under the Patents Act;
- (c) The application in India must be made within 12 months from the date of the basic application.

If the applicant fails to file the application in India within 12 months from the date of the basic application, the application can be opposed under s 25(1)(i) or s 25(2)(i). Moreover, if the basic application was filed in a country at a time when that country was not notified as a convention country for the purposes of the Patents Act, the application may be refused under s 15 of the Patents Act. This would be the case even if the three preconditions mentioned in s 135(1) of the Patents Act are fulfilled. The language of s 135 requires the basic application to be an 'application for a patent in respect of an invention in a convention country'. This means that the basic application must be made to a country which is a convention country when the basic application is made in order to qualify the applicant for a priority claim under s 135 of the Patents Act. The fact that the application was made in a country which may subsequently be declared as a convention country will not suffice.

7.49 Every convention application shall:97

(a) be accompanied by a complete specification; and

- (b) specify the date on which and the convention country in which the application for protection, or as the case may be, the first of such applications was made; and
- (c) state that no application for protection in respect of the invention had been made in a convention country before that date by the applicant or by any person from whom he derives title.

7.50 To claim the convention status, an applicant should file the convention application in the Patent Office within 12 months from the date of filing of a similar application in the convention country (basic application). Where the applicant has made two or more applications in one or more convention countries and those inventions are related to constitute one invention, one application may be made by any or all of the persons

⁸⁸ See Manual of Patent Practice and Procedure, Patent Office.

⁸⁹ Patents Rules 2003, Form 1.

⁹⁰ Ibid.

⁹¹ Patents Act 1970, ss 2(1)(c) and 135.

⁹² Ibid, s 134.

⁹³ Ibid.

⁹⁴ See Danieli AC Officine Maccaniche SPA v Controller of Patents and Designs (2000) 1 Cal LT 7 (HC), (2000) PTC 219.

⁹⁵ See Danieli AC Officine Maccaniche SPA v Controller of Patents and Designs (2000) 1 Cal LT 7 (HC), (2000) PTC 219. See Novartis Application (1602/MAS/98) (Unreported) where the Controller rejected the application, inter alia, that the application was filed in India on 17 July 1998 as a convention application claiming Swiss priority whereas Switzerland was not a convention country on that date.

⁹⁶ See Danieli AC Officine Maccaniche SPA v Controller of Patents and Designs (2000) 1 Cal LT 7 (HC), (2000) PTC 219. In this case the basic application was made in 1994 when Italy was not notified as a convention country under the Patents Act 1970. The notification of 72 countries as convention countries including Italy was made only in 1995.

⁹⁷ Patents Act 1970, s 136(1).

⁹⁸ Ibid, s 135(1).

mentioned in s 135(1) within 12 months from the date on which the earlier or earliest of those applications was made. ⁹⁹ The applicant shall furnish, in addition to the complete specification, copies of the specifications or corresponding documents (priority documents) filed or deposited by the applicant in the patent office of the convention country. ¹ If the specification or the priority documents are in a foreign language, a translation in English of the same shall be furnished along with a verifying affidavit. ² An applicant shall also furnish certified copies of the specification or the priority documents if required by the Controller. ³

(C) PCT International Application

7.51 The Patent Cooperation Treaty (PCT) is an international filing system which allows applicants to prefer applications in all the designated countries conferring late entry to the national offices without affecting the priority date. An international application is a patent application filed under the provisions of the PCT. An international application under the PCT can be filed only if at least one applicant is a national or a resident of India. It may be filed before the appropriate office in triplicate in English or Hindi.⁴

7.52 An international application under the Patents Act refers to an application for patent made in accordance with the Patent Cooperation Treaty. Chapter III of the Patents Rules deals with international applications filed under the PCT. The Patent Office in India is a receiving office for international applications filed by nationals or residents of India. 6

(D) PCT-National Phase Application: Section 7(1A)

7.53 An application corresponding to an international application under the PCT under s 7(1A), made in Form 1, claiming the priority of the international filing date is known as the PCT-National Phase Application.⁷ Every international application under the PCT for a patent, as may be filed designating India, shall be deemed to be an application under the Patents Act provided a corresponding application (PCT National Phase Application) has also been filed before the Controller in India. The filing date of an international application and its complete specification processed by the patent office as the designated office or elected office shall be the international filing date accorded under the PCT.9 The Patent Office shall not commence processing of such an application before the expiry of 31 months from the international priority date. 10 This time-limit of 31 months from the date of international priority is the time-limit stipulated under the PCT.11 However, the applicant may make an express request in Form 18 by paying the stipulated fees to process or examine the application at any time before 31 months. 12

7.54 The title, description, drawings, abstract and claims filed with an international application designating India shall be taken as the complete specification for the purposes of the Patents Act. ¹³ Though an ordinary application filed under the Patents Act treats the abstract as an accompaniment to the specification, the abstract filed with an international application shall be taken as the complete specification under s 10(4A) of the Patents Act. An applicant need not submit the documents while entering the national phase for filing the application in the designated or elected member countries, as the PCT provides for a mechanism to send those documents to the designated offices. But filing of such documents may speed up the processing.

7.55 Every international application designating India shall comply with the provisions of r 20 and in case of any failure to comply with the said requirements, the application will be deemed to be withdrawn. 14 The

⁹⁹ Patents Act 1970, s 137(1). See also *Karlgaard's Application* (1966) RPC 553. In this case, a convention application for a patent covering three forms of invention rightly claimed priority as regards the third form, but the foreign application for the first and second forms was made more than twelve months before the British application and hence was ineligible for convention priority. The applicants attempted to overcome this difficulty by disclaiming convention priority in respect of the first and second forms, thereby seeking to restrict their claim to convention priority to the third form of invention only. Holding that such a disclaimer was inconsistent with the prayer of the applicant to accord the benefit of conventional priority, the court held that the applicants must either delete all claims to the first and second forms, or abandon their claim to convention priority.

¹ Patents Act 1970, s 138(1).

² Ibid, s 138(2).

³ For more details on convention applications, see para 5.56 onwards.

⁴ Patents Rules 2003, r 19(1).

⁵ Patents Act 1970, s 2(1)(ia).

⁶ Patent Cooperation Treaty, art 10.

⁷ Patents Rules 2003, r 20(1).

⁸ Patents Act 1970, s 7(1A).

⁹ Ibid, s 7(1B).

¹⁰ Patents Rules 2003, rr 20(2) and 20(4)(i).

¹¹ Patent Cooperation Treaty, art 2(xi).

¹² Patents Rules 2003, r 20(4)(ii).

¹³ Patents Act 1970, s 10(4A).

¹⁴ Patents Rules 2003, r 22.

provisions of ch III of the Patents Rules which deal with international applications under the PCT shall be supplemental to the PCT and in case of any conflict with the provisions of the Treaty and the regulations and the administrative instructions made under the Treaty, the provisions of the Treaty shall prevail. 15

(E) Application for Patent of Addition: Section 54

7.56 A patent of addition is granted for an improvement or modification of an invention. ¹⁶ As the term implies, a patent of addition is granted as an addition to a pre-existing invention described or disclosed in the complete specification. The invention so described or disclosed is known as the 'main invention'. As a patent of addition can be granted only on the basis of an earlier application or in a granted patent, the grant of the patent of addition cannot precede the grant of the main invention. ¹⁷ For the same reason, the date of filing of the application for a patent of addition should be the same as or later than the date of filing of the application of the main invention. ¹⁸

7.57 The object to providing for patents of addition is to protect improvement and modification of an inventor which may be made in the course of working of his patent, which may, by itself, not be entitled for a separate patent. Such improvements and modifications are tagged along to the main invention and protected along with the main invention so long as the main invention exists. No additional renewal fee is required for such additions. However, the validity of a patent of addition is not affected by a revocation of the main invention.

7.58 A patent of addition may be granted in lieu of an independent patent for an improvement or a modification of another invention. Where an invention, which is an improvement in or modification of another invention, is the subject of an independent patent held by the patentee who also holds the patent for the main invention, the patentee may request the Controller to revoke the independent patent (the patent for the improvement or modification) and grant a patent of addition in lieu of it, bearing the same date as the date of the patent so revoked. ¹⁹ If the Controller is satisfied

19 Ibid, s 54(2).

that the provisions under the Patents Act have not been met, he will be bound to make an order of revocation.²⁰

7.59 A specification in respect of a patent of addition under s 54 shall contain a specific reference to the number of the main patent, or the application for the main patent, as the case may be, and a definite statement that the invention comprises an improvement or modification over the invention claimed in the specification of the main patent granted or applied for. ²¹ A patent of addition may be combined with an earlier patent of addition and preferred in one application. An ordinary application may also be converted into an application for a patent of addition pursuant to an opposition proceeding. ²²

(i) Requirements for a Patent of Addition

7.60 Under s 54 of the Patents Act, an applicant must satisfy the following requirements:²³

- (a) the patent of addition must relate to an improvement in or modification of the main invention;
- (b) such improvement or modification should pertain to an invention described or disclosed in the complete specification of the main invention:
- (c) the patent of addition must show that the invention comes within the scope of an improvement or modification of the main invention, ie, it should not pertain to a improvement or modification not covered in the main invention;
- (d) the complete specification of the patent of addition must be filed on the same date or after the filing of the complete specification of the main invention.

A patent of addition must relate to a single invention for which a patent has already been granted. It shall not be an addition to a series of invention for which separate patents subsist. A patent of addition must be fairly

¹⁵ Patents Rules 2003, r 23.

¹⁶ Patents Act 1970, ss 2(1)(q) and 54. See Terfenadin [1998] FSR 145, p 155.

¹⁷ Patents Act 1970, s 54(4).

¹⁸ Ibid, s 54(3).

²⁰ See Aktiebolaget Celloplast's Application (1978) RPC 239, p 243. The court held that if the Comptroller was satisfied upon the application of s 26(2) of the UK Patents Act 1949 [which corresponds to s 54(2) of the Patents Act 1970] that the provisions of the statute were met, then the Comptroller had no discretion and had to do what the statute required of him. The earlier decision in Van der Lely's Application (1958) RPC 383 was not followed.

²¹ Patents Rules 2003, r 13(3).

²² See Hauni-Werke Korber & Co KG's Patent of Addition (1976) RPC 328, [1980] FSR 121.

²³ Section 54 of the Patents Act 1970 in substance reproduces s 26 of the UK Patents Act 1949. For further details, see Justice N Rajagopala Ayyangar, 'Report on the Revision of the Patent Laws', September 1959, para 510 onwards.

based on the main invention.²⁴ In determining whether the patent of addition is fairly based on the main invention, the court has to look into the whole of the disclosure and not merely the claims.²⁵

(ii) 'Improvement or modification'

7.61 In determining whether an improvement or modification has been made to the main invention, a proper comparison should be made between the novel contributions made by the two specifications to the art. It will be necessary to consider both what has been changed and what has been retained. The meaning of the expressions 'improvement' and 'modification' are well-understood. In *Elliott Brothers (London) Ltd's Application*, Lloyd-Jacob J said: ²⁷

The meaning of the words 'modification' and 'improvement' is clear enough. A modification is an alternation which does not involve a radical transformation and an improvement is a variation, whether by addition, omission, or alteration to secure a better performance, whilst retaining some characteristic part... What seems to be abundantly clear is that the mere presence of a number of elements common to both inventions if common also in the known art, is not sufficient to make one invention an improvement or addition to the other (See Sadgrove v Godfrey (1920) 37 RPC 7).

(iii) 'Described or disclosed'

7.62 It is important to note that s 54(1) of the Patents Act requires the improvement or modification to be described or disclosed in the complete specification of the main invention. It does not limit such improvement or modification to what is claimed in the earlier specification. ²⁸ In determining whether a patent of addition qualifies as an improvement or a modification, the court has to looking into the whole of the disclosure made in the main invention and not merely to the claims. ²⁹ Thus, the mere claiming in a

later application of a subject matter contained in the earlier specification which is not claimed therein, cannot qualify for a patent of addition as the purpose of such a claim would only be to rectify an omission to claim at the first instance.³⁰

(iv) Improvements Qualifying for a Separate Patent

7.63 The Patents Act allows for the making of an application for an improvement or modification independent of s 54. Under s 54, the improvement or modification of the invention described in the specification of the main invention which is required for qualifying for an application for a patent of addition need not be of such character as to qualify for an independent patent.31 In other words, a patent of addition will be granted for an improvement or a modification of an earlier invention provided such an invention is described or disclosed in the complete specification of the main invention. The inventive step mentioned in the main invention (earlier patent) shall be taken into account in determining the inventive step of the improvement as the same is based on the earlier patent and any publication or use of the invention in the complete specification of the main invention or the patent of addition cannot be a ground for its refusal or revocation.³² For this reason, s 56(1) makes it clear that the validity of patent of addition shall not be questioned on the ground that the invention ought to have been the subject of an independent patent.

7.64 The Patents Act also provides that a complete specification filed after a provisional specification may include claims in respect of developments or additions to the invention described in the provisional specification, if they are of such a nature that the applicant would be entitled to make a separate application for a patent under s 6 of the Patents Act. 33 It also provides for a similar provision for a convention application. 34

7.65 The test to determine whether an improvement or a modification will qualify for a separate patent, as opposed to a patent of addition under s 54, will involve:

(1) identifying whether the improvement or modification relates to a single invention or to a group of invention linked to form a single

²⁴ See para 5.43 for discussion on 'fairly based'. See also Hughes Tool Co v Ingersoll-Rand Co Ltd [1977] FSR 406; Letraset Ltd v Rexel Ltd [1975] FSR 62, (1976) RPC 51 (CA).

²⁵ See Kopat's Patent (1965) RPC 404.

²⁶ See Buchanan v Alba Diagnostics Ltd (2000) RPC 367, p 383.

^{27 [1966]} FSR 334, p 338, (1967) RPC 1. In this case, the application for patent of addition was refused as the improvement or modification claimed represented a radical departure from the novel features introduce by the main invention.

²⁸ See Justice N Rajagopala Ayyangar, 'Report on the Revision of the Patent Laws', September 1959, para 510 onwards. See also Georgia Kaolin Co Ltd's Application (1956) RPC 121; Welwyn Electrical Laboratories Ltd's Application (1957) RPC 143.

²⁹ See Hughes Tool Co v Ingersoll-Rand Co Ltd [1977] FSR 406.

³⁰ See Welwyn Electrical Laboratories Ltd's Application (1957) RPC 143, p 146.

³¹ Justice N Rajagopala Ayyangar, 'Report on the Revision of the Patent Laws', September 1959, para 519.

³² Patents Act 1970, s 56.

³³ Ibid, s 10(7).

³⁴ Ibid, s 136(2).

- inventive concept as disclosed in the specification of the main invention; and
- (2) determining whether the improvement or modification is fairly based on the matter disclosed in the specification of the main invention.

If the above two steps are answered in the negative, the improvement or modification may qualify for a separate patent if it satisfies the conditions of patentability under the Patents Act.

(v) Term

7.66 A patent of addition does not extend the term of the main invention. A patent of addition is granted for a term equal to that of the main invention or to such extent of the term that has not expired. As the patent of addition is based on the main invention (earlier patent), it shall remain in force during the term of the main invention or until the main invention is revoked, whichever is shorter. If the patent for the main invention is revoked by the court or the Controller, the patentee may make a request in the prescribed manner for the patent of addition to be treated as an independent patent for the remainder of the term of the patent.

(vi) Renewal Fees

7.67 The advantage of claiming an improvement or a modification of an invention as a patent of addition is that no renewal fee is payable in respect of the patent of addition. The renewal fee paid with regard to the main invention will suffice. But, if the main invention is revoked and the patent of addition becomes an independent patent, then the same fee as that of the main invention shall be paid on the same dates as that of the main invention had that been valid.³⁵

(vii) Novelty and Obviousness

7.68 A patent of addition is likely to raise contentious issues with regard to novelty and obviousness. The Patents Act states that the grant of a patent of addition shall not be refused or a patent of addition already granted shall not be revoked or invalidated on the ground only that the invention claimed in the complete specification does not involve any inventive step. In determining obviousness, the patent of addition shall not be regarded as obvious or lacking an inventive step by the fact of:

35 Patents Act 1970, s 55(2).

- (a) any publication or use of the main invention described in its complete specification; or
- (b) any publication or use of any improvement in or modification of the main invention described in the complete specification of a patent of addition to the patent for the main invention or of an application for such a patent of addition.

Such publication would include publication by the patentee as well as by third parties.³⁶ The validity of a patent shall not be questioned on the ground that the invention ought to have been the subject of an independent patent.³⁷

7.69 In determining the novelty of the invention claimed in the complete specification of the patent of addition, the complete specification of the main invention shall be considered.³⁸ In other words, the complete specification of the main invention may be cited for anticipation by publication. The claim in a patent of addition must disclose a novel matter not disclosed in the complete specification of the main invention, though it need not involve any inventive step.³⁹

(F) Divisional Application: Section 16

7.70 When an application is divided out of the original application, it is termed a divisional application. Divisional applications are filed to overcome objections on plurality of inventions, as the law allows only one application per invention. The applicant may divide the invention into separate applications where the claims of the complete specification relate to more than one invention. The applicant may also, to meet the official objection raised by Controller, divide the application and file two or more applications as applicable for each of the inventions. Such divisional application shall be deemed to have been filed on the date on which the original application was made. This method of granting the same priority date to the divisional application as that of the original application is known as ante dating. 41

³⁶ See Monsanto Co (Salyer's) Application [1966] FSR 271, (1969) RPC 75.

³⁷ Patents Act 1970, s 56(1).

³⁸ Ibid, s 56(2).

³⁹ See Justice N Rajagopala Ayyangar, Report on the Revision of the Patent Laws, September 1959, para 519. See also P & S' Application (1952) 69 RPC 249.

⁴⁰ Patents Act 1970, s 7(1).

⁴¹ The expressions 'ante-dated' and 'ante-dating' do not appear in the expln to s 16(3) though the sub-section imports the idea. The expressions, however, are mentioned in s 11(7).

7.71 The divisional application shall be accompanied by a complete specification, which shall not include any matter not in substance disclosed in the original application. 42 In other words, no new matter shall be added in the divisional application. If new matter is found in the divisional application, it can be amended before the grant to exclude such matter. The complete specification of the original application or the divisional application may be amended, in such a manner, that neither of the specifications includes a claim for any matter claimed in the other. 43 An amendment to divide the application into two new applications can be refused by the Patent Office on the ground that the patent had already been granted and that such procedures were available only before grant.4 There is no provision to file a divisional application after the grant to overcome a finding of plurality of invention. 45 The Controller is bound to refuse a divisional application the disclosure of which extends beyond that of the main or parent application. 46 A specification filed along with the divisional application shall contain a specific reference to the number of the original application. 47

7.72 The purpose of a divisional application is to protect the rights of an applicant who has disclosed more than one invention in the parent application. It should not be allowed for merely claiming narrower or broader protection for the same invention. ⁴⁸ In cases where a divisional application is made along with a request for post-dating, the Patent Office will not be obliged to deal with the application after the normal period of acceptance has expired and which has not been renewed within the extended time. ⁴⁹ The Controller has complete discretion to allow ante-dating of a divisional application provided it does not ante-date it to a period earlier than the parent application.

PUBLICATION AND EXAMINATION

7.73 As soon as the Patent Office receives the application, it accords a number to it such that applications filed in a year will constitute a series

identified by the year of such filing. PCT National phase applications shall constitute a different series. ⁵⁰ Every application shall be screened to classify them into the respective field of technology and to find whether the invention disclosed in the application was relevant for defence purposes.

(A) Publication of Applications: Section 11A

7.74 Ordinarily, an application for patent shall not be open to public before the expiry of 18 months from the date of filing of application or the date of priority of the application whichever is earlier. The applicant may make a request in Form 9, upon the payment of prescribed fee, for an early publication before the expiry of the 18-month period mentioned in s 11A(1) of the Patents Act. Every application shall be published within one month from the date of expiry of the 18 month period or one month from the date of request for publication under r 24A, except applications in respect of which there are secrecy directions or applications which are abandoned under s 9 or applications which are withdrawn three months before the expiry of 18 months. In the case of applications in respect of which secrecy directions have been given under s 35, such applications shall be published after the expiry of 18 months or when the secrecy directions has ceased to operate, whichever is later. Secretary directions applications in the secrecy directions has ceased to operate, whichever is later.

7.75 Every application published under s 11A shall include particulars with regard to the date of the application, number of the application, name and address of the applicant identifying the application and an abstract. ⁵⁵ In the case of an application for an invention involving biological material, upon the publication of such application, the depository institution will make the biological material available to the public. ⁵⁶ The Patent Office may make the application together with the complete and provisional specification, drawings and abstract available to the public on payment of the prescribed fees. ⁵⁷ A request may be made in writing on payment of the prescribed fees and copies of the said documents may be procured from the appropriate office.

⁴² Patents Act 1970, s 16(2).

⁴³ Ibid, s 16(3).

⁴⁴ See Ogawa Chemical Industries Ltd's Applications (1986) RPC 63.

⁴⁵ See Mobil Oil Corpn Application (1969) RPC 586, [1969] FSR 347, p 352.

⁴⁶ See Van der Lely's Application (1987) RPC 61.

⁴⁷ Patents Rules 2003, r 13(2).

⁴⁸ See Armstrong Kropp Development Corpn's Applications (1974) RPC 268; Abbot Laboratories' Application (1955) 72 RPC 345, p 346.

⁴⁹ See Standard Magnet AG's Application [1974] FSR 393, (1977) RPC 359, pp 360-61.

⁵⁰ Patents Rules 2003, r 11.

⁵¹ Patents Act 1970, s 11A(1); Patents Rules 2003, r 24.

⁵² Ibid, s 11A(2); Ibid, r 24A.

⁵³ Ibid, s 11A(3).

⁵⁴ Ibid, s 11A(4).

⁵⁵ Ibid, s 11A(5).

⁵⁶ Ibid, s 11A(6)(a).

⁵⁷ Ibid, s 11A(6)(b); Patents Rules 2003, r 27.

(i) Rights of the Applicant

7.76 Section 11A(7) of the Patents Act pertains to rights of an applicant. The said provision was introduced to accommodate the transitory hurdles that usually accompany a regime change. Prior to 1 January 2005, the Patents Act went through a 10-year transition period during which the patent office began to receive applications for product patents for pharmaceuticals and agro-chemicals. As the rights in a patent accrue retrospectively, there was a real possibility of the right holders proceeding against the competitors who were using the subject matter of invention prior to 1 January 2005. Section 11A(7) protects the rights of competitors and provides for reasonable royalty to the right holder.

7.77 The section provides that the applicant shall have like rights and privileges from the date of publication of the application for the patent till the date of grant of a patent, as if a patent for the invention had been granted on the date of publication of the application. However, s 11A(7) imposes the following restrictions:

(1) the applicant shall not be entitled to institute any proceedings for infringement until the patent has been granted;

(2) the rights of a patentee in respect of applications made under s 5(2) before 1 January 2005 shall accrue from the date of grant of the patent;⁵⁸

(3) after a patent is granted in respect of applications made under s 5(2), the patent-holder shall only be entitled to receive reasonable royalty from such enterprises which have made significant investment and were producing and marketing the concerned product prior to 1 January 2005 and which continue to manufacture the product covered by the patent on the date of grant of the patent and no infringement proceedings shall be instituted against such enterprises.

7.78 The third restriction detailed above is likely to come under judicial scrutiny for many reasons. First, it restricts the right to institute a suit for infringement against an alleged infringer and confines the remedy to receiving royalty. Secondly, the clause does not give any guidance as to the authority that would determine the royalty and what amount would be reasonable. Ordinarily, it is the Controller who determines the royalty in the case of compulsory licences. Though the courts have evolved detailed guidelines for the award of royalty in the case of licences, it remains to be

seen whether the same principles would apply to compute the royalty paid under s 11A(7). ⁵⁹ Thirdly, the clause requires the enterprise (competitor) to produce and market the concerned product prior to 1 January 2005. This requirement may impose difficulties if the enterprise did not, on its own, market the concerned product. Fourthly, the requirement that the enterprise should 'continue to manufacture' the concerned product may cause problems where the enterprise is restrained by the right-holder by some other means, such as a temporary injunction procured pursuant to the grant of exclusive marketing rights under the Patents Act.

(B) Request for Examination: Section 11B

7.79 An application will be taken up for examination if the applicant or any other interested person makes a request for examination, in Form 18 paying the prescribed fee, after the publication of application within 48 months from the date of priority of the application or from the date of filing of application, whichever is earlier. Ordinarily, PCT National phase applications are processed or examined only after the expiry of 31 months from the priority date, but such application may be taken up for examination before the said period on the express request of the applicant filed in Form 18 along with the prescribed fees.

7.80 In the case of application filed under s 5(2) of the Patents Act before 1 January 2005, a request for examination shall be made by the applicant or any other interested person within 48 months from the date of priority or from the date of filing of application. The period for making a request for examination under s 11B for applications filed before 1 January 2005 shall be the period specified under s 11B before the commencement of the Patents (Amendment) Act 2005 or the period specified under the Rules, whichever expires later. The period specified under the Rules, whichever expires later.

7.81 If the applicant or any other person interested does not make a request for examination of the application within 48 months under s 11B(1) or s 11B(3) or within six months from the date of revocation of the secrecy direction, whichever is later, the application will be treated as withdrawn by the applicant. ⁶⁴ However, the applicant may, at any time after filing the

⁵⁸ Section 5 was omitted by the Patents (Amendment) Act 2005 with retrospective effect from 1 January 2005.

⁵⁹ See para 22.82 onwards.

⁶⁰ Patents Act 1970, s 11B(1); Patents Rules 2003, r 24B(1)(i).

⁶¹ Ibid, rr 20(2), 20(4)(i) and 20(4)(ii).

⁶² Ibid, r 24B(1)(ii).

⁶³ Ibid, r 24B(1)(v).

⁶⁴ Patents Act 1970, s 11B(4); Patents Rules 2003, r 24B(1)(iii).

application but before the grant of patent, withdraw the application by making a request in writing.⁶⁵

7.82 A request for examination under s 16(3) shall be made within 48 months from the date of filing of the application or from the date of priority of the first mentioned application or within six months from the date of filing of the further application, whichever is later.⁶⁶

(C) Examination of Application: Section 12

7.83 The applications filed under the Patents Act shall be taken up for examination as per the order in which the requests for examination are made. Once a request for examination is made under s 11B, the application, specification and other documents shall be referred by the Controller to an examiner for making a report known as the First Examination Report. The Controller shall refer the matter to the examiner ordinarily within one month from the date of its publication or from the date of the request for examination, whichever is later. The report shall be made to the Controller in respect of the following matters:

- (a) whether the application and specification and other documents relating thereto are in accordance with the requirements of the Patent Act and the Patent Rules;
- (b) whether there is any lawful ground of objection to the grant of the patent under the Act in pursuance of the application;
- (c) the result of investigations made under s 13 of the Patents Act; and
- (d) any other matter which may be prescribed.

7.84 The examiner shall make the report ordinarily within one month but not exceeding three months from the date of reference of the application to him by the Controller. The Controller shall dispose off the report of the examiner within one month from the date of receipt of the report. Where the applicant files a request for examination, the first examination report along with the application and specification shall be sent to the applicant within six months from the date of the request for examination or from the date of publication, whichever is later. Where the request for

examination is filed by any other interested person, an intimation of such examination shall be sent to such person.⁷²

7.85 The examination of an application for a patent by the examiner involves certain adjudicatory process.73 Section 12(1)(b) is broadly worded to include 'any lawful ground of objection to the grant of the patent under the Act'. Clause (c) of s 12(1) requires the first examination report to contain the results of investigations made under s 13 of the Patents Act. In this way, s 12 had a direct nexus with s 13, which details the manner in which an examiner shall make investigations for the purpose of anticipation. Together, ss 12 and 13 constitute a code of examination for examiners.⁷⁴ The examination and investigations done under ss 12 and 13 of the Patents Act shall not be deemed to warrant the validity of any patent and no liability shall be incurred by the Central Government or any officer for such examination, investigation or report. 75 The reports of the examiners made to the Controller shall be treated as confidential and shall not be open to public inspection or be published by the Controller. Such reports shall not be liable to be produced or inspected in any legal proceedings unless the court certifies that the production or inspection is desirable in the interest of justice.76

7.86 The examiner may raise objections in the first examination report. The objections of the examiner shall be contained in a reasoned statement. The examiner has to act in a quasi-judicial manner and should give a reasoned order under s 12. In cases where a statement of objection is issued to the applicant to comply with the requirements therein, the applicant has to put the application in order for grant under s 21 within 12 months from the date on which the first statement of objection was issued. Once the examiner issues his report, he will have no power to amend or delete anything that originally formed a part of the report.

(D) Search for Anticipation: Section 13

7.87 As an invention shall be regarded as new if it does not form a part of the state of the art, the examiner has to determine novelty of the invention by making a search for anticipation as mentioned in s 13. The fact that the

⁶⁵ Patents Act 1970, s 11B(4); Patents Rules 2003, r 26.

⁶⁶ Patents Rules 2003, r 24B(1)(iv).

⁶⁷ Ibid, r 24B(2)(i).

⁶⁸ Patents Act 1970, s 12(1).

⁶⁹ Ibid, s 12(1).

⁷⁰ Patents Rules 2003, r 24B(2)(ii).

⁷¹ Ibid, r 24B(2)(iii).

⁷² Patents Rules 2003, r 24B(3).

⁷³ Dimminaco AG v Controller of Patents and Designs (2002) IPLR 255, p 260.

⁷⁴ Ibid.

⁷⁵ Patents Act 1970, s 13(4).

⁷⁶ Ibid, s 144.

⁷⁷ Patents Rules 2003, r 24B(4).

examiner shall make an investigation under s 13 for the purpose of ascertaining novelty does not mean that the power of the examiner is confined to matters illustrated in that section, as the report of the examiner may deal with a wide array of matters detailed in s 12(1).

7.88 The standard of novelty required by the Patents Act is that of 'relative novelty'. But the introduction of the definition of 'new invention' in s 2(1)(1), which prescribes the standard of 'absolute novelty', raises doubts with regard to the standard of novelty followed under the Patents Act. For the purpose of determining anticipation by previous publication or previous claim, s 13 details the documents which the examiner shall take into consideration. It is pertinent to note that s 13 is confined to anticipation by prior publication as it restricts the search for anticipation to documents alone. It does not cover anticipation by prior use. It is sufficient to point out that anticipation by prior use is a ground for revocation under s 64(1)(e).

7.89 The examiner shall make investigation for the purpose of ascertaining whether the invention so far as claimed in any claim of the complete specification:

- (1) has been anticipated by publication before the date of filing of the applicant's complete specification in any specification filed in pursuance of an application for a patent made in India on or after 1 January 1912;⁸⁰
- (2) is claimed in any claim of any other complete specification published on or after the date of filing of the applicant's complete specification, being a specification filed in pursuance of an application for a patent made in India and dated before or claiming a priority date earlier than that date;⁸¹ and
- (3) has been anticipated by publication in India or elsewhere in any other document, other than the those mentioned in clause (1) and (2), before the date of filing of the applicant's complete specification. 82

The first and the third clauses pertain to anticipation by prior publication whereas the second clause pertains to anticipation by prior claiming.

(E) Report of Examiner: Section 14

7.90 If the First Examination Report received by the Controller is adverse to the applicant or requires any amendment of the application, specification or other document to ensure compliance with the provisions of the Patents Act or the Patent Rules, the Controller shall communicate as expeditiously as possible the gist of the objections to the applicant. The Patents Rules 2003 envisages different procedures in cases of anticipation by prior publication and anticipation by prior claiming.

(i) Anticipation by Prior Publication

7.91 If the investigations by the examiner reveal that the invention claimed in the complete specification is anticipated under ss 13(1)(a) or 13(2), the Controller shall communicate the gist of the specific objections to the applicant and afford an opportunity to the applicant to amend his specification. ⁸³ If the applicant contests any of the objections raised in the report or if he files again his specification along with his observations as to whether or not the specification is to be amended, the applicant shall be given an opportunity of being heard, provided he makes a request for hearing 10 days before the final date of the period referred to under s 21(1) of the Patents Act or within such shorter period as the Controller may allow. ⁸⁴

7.92 Rule 28 of the Patents Rules 2003 governs the procedure where the applicant contests any of the objections communicated to him by the Controller. If the applicant requests for a hearing within one month from the date of communication of the gist of objections or the Controller grants a hearing whether or not the applicant re-filed his application, the Controller shall fix a date and time for hearing having regard to the period remaining for putting the application in order, or other circumstances of the case. The applicant shall be given 10 days' notice of such hearing or such shorter notice as the Controller deems fit and the applicant shall notify the Controller whether he will be attending the hearing. After hearing the applicant or without hearing the applicant if he does not want to be heard, the Controller may specify or permit such amendment to the specification as he thinks fit and may refuse to grant the patent unless the amendment so specified or permitted is made within such period as he may fix. 86

⁷⁸ For a detailed discussion on 'relative novelty' and 'absolute novelty', see ch 16.

⁷⁹ See also the definition of 'new invention' in s 2(1)(l) which deals with both anticipation by publication and anticipation by use.

⁸⁰ Patents Act 1970, s 13(1)(a).

⁸¹ Ibid, s 13(1)(b).

⁸² Ibid, s 13(2).

⁸³ Patents Rules 2003, r 28(1).

⁸⁴ Patents Act 1970, s 14; Patents Rules 2003, r 28(2).

⁸⁵ Patents Rules 2003, r 28(3).

⁸⁶ Patents Act 1970, s 15; Patents Rules 2003, r 28(5).

7.93 If it appears to the Controller that the invention claimed in the complete specification has been anticipated under ss 13(1)(a) or 13(2), he may refuse the application. However, the Controller may not refuse the application, if the applicant shows to the satisfaction of the Controller that the priority date of the claim of his complete specification is not later than the date on which the relevant document was published or if the applicant amends his complete specification to the satisfaction of the Controller. The Controller is satisfied that the invention is anticipated by prior publication under s 13(1)(a) and the other complete specification was published on or after the priority date of the applicant's claim, he may require a reference to be made to the other specification following the procedure under s 18(2), unless the applicant is able to show that the priority date of the applicant's claim is not later than the priority date of that specification.

(ii) Anticipation by Prior Claiming

7.94 If it is found that the invention claimed in the complete specification is anticipated under s 13(1)(b) of the Patents Act, the applicant shall be informed about the same and an opportunity shall be afforded to amend his specification. If the applicant's specification is found to be in order for grant except for an objection raised under s 13(1)(b), the Controller may postpone the grant of the patent and allow a period of two months to the applicant to remove the objection. 89

7.95 If the applicant makes any amendment consequent to the objections, the amended specification shall be examined and investigated in like manner as the original specification. There may be as many correspondences as necessary between the applicant and the Controller after the first examination report is issued, but the time for meeting the objections and putting the application in order shall be done within 12 months from the date of issue of the first examination report. If the applicant fails to put the application in order within such time, the application will be treated as abandoned.

7.96 If the Controller is satisfied that the invention is anticipated by prior claiming in another patent, he may direct that a reference to that patent be made in the applicant's complete specification. Before such a reference is

made, the Controller shall inform the applicant and shall give him an opportunity to amend his specification. 92

(a) Reference to Another Specification

7.97 If it appears to the Controller that the invention is claimed in a claim of any other complete specification referred to in s 13(1)(b), the Controller may direct that a reference to that other specification shall be inserted by way of notice to the public in the applicant's complete specification unless the applicant shows that the priority date of his claim is not later than the priority date of the claim of the other specification or amends the specification to the satisfaction of the Controller. 93

7.98 The Controller need not look into the validity of the prior specification while directing the reference. In some cases, it may lead to a reference to an invalid specification. If the applicant makes a request or if the Controller is satisfied that the objection has not been removed within the period specified in r 29(2), a date shall be fixed for hearing and the applicant shall be given at least 10 days' notice of the date so fixed. After the hearing or without a hearing where the applicant desires not to be heard, the Controller may specify or permit such amendment of the specification, as made to his satisfaction, and may direct that reference to such other application be inserted in the applicant's specification unless the amendment is made or agreed to within such period as the Controller may fix. ⁹⁴

7.99 If the Controller directs that a reference to another specification shall be inserted in the applicant's complete specification, such reference shall be in the following form:⁹⁵

...

Reference has been directed, in pursuance of section 18(2) of the Patents Act, 1970, to the specification filed in pursuance of application No...

7.100 If the invention is anticipated by prior publication under s 13(1)(a) and the other complete specification was published on or after the priority date of the applicant's claim, the provision detailed above shall apply in the same manner as they apply to a specification published on or after the date of filing of the applicant's complete specification. ⁹⁶

⁸⁷ Patents Act 1970, s 18(1).

⁸⁸ Ibid, s 18(3). See para 7.97 for the procedure of inserting a reference under s 18(2). See also para 10.18 onwards.

⁸⁹ Patents Rules 2003, r 29(2).

⁹⁰ Patents Act 1970, s 13(3).

⁹¹ Ibid, s 21; Patents Rules 2003, r 24B(4).

⁹² Patents Rules 2003, r 29(1).

⁹³ Patents Act 1970, s 18(2). See also para 10.18 onwards.

⁹⁴ Patents Rules 2003, r 30.

⁹⁵ Ibid, r 31.

⁹⁶ Patents Act 1970, s 18(3)

7.101 The real purpose of a reference 'is to give the public such information as they ought to have about the general situation in a form as complete and as accurate as it can be'. ⁹⁷ It need not be a disclaiming reference. Such reference shall not be of guidance in determining the issue of infringement. ⁹⁸

(F) Powers of Controller

7.102 Under ch IV of the Patents Act, the Controller has the following powers in dealing with applications for patents:

(i) Amendment and Refusal of Application: Section 15

7.103 If the Controller is satisfied that the application or any specification or any other document does not comply with the requirement of the Patents Act or the Patents Rules, he may refuse the application or require such documents to be amended to his satisfaction. If the applicant fails to carry out the amendment, the Controller may refuse the application. The power of the Controller under s 15 is discussed in detail in ch 13.99 An order of the Controller refusing an application pursuant to a pre-grant opposition proceeding is an order passed under s 15 of the Patents Act. It is interesting to note that though the grounds of opposition under s 25(1) are limited ('but on no other ground'), the power of the Controller under s 15 to pass an order pursuant to a pre-grant opposition is much wider and need not be confined to the grounds raised in the pre-grant opposition. An order under s 15 may refuse an application, specification or any other document which 'does not comply with the requirements' of the Patents Act and the Patents Rules. Thus, a pre-grant opponent, who has to confine his grounds of opposition to the grounds mentioned in s 25(1), may bring to the notice of the Controller any issue of non-compliance with the Act and the Rules upon which the Controller is empowered to pass an order under s 15. An order made under s 15 is appealable.

(ii) Division of Application: Section 16

7.104 As detailed in para 7.70, the Controller has the power to make orders with regard to division of applications. An order made under s 16 is appealable.

(iii) Dating of Application: Section 17

7.105 An application may be post-dated to a date not later than six months from the date of application on the request of the applicant made at any time before the grant. The provisions of s 17(1) shall not apply in case the application is deemed to be abandoned under s 9(1) of the Patents Act. In the United Kingdom, the application for post-dating will be deemed to have been abandoned only after the extension period has expired whether or not an extension was sought for. A request for post-dating filed during the extension period may be entertained even if no formal application for extension is made. Where the application or the specification is amended under s 15 to comply with the requirements of the Patents Act or the Patents Rules and the Controller is satisfied that post-dating is required, he may direct the application or the specification to be deemed to have been made on the date on which the requirements are complied with or on the date on which it is re-filed after complying with the requirements.³ An order made under s 17 is appealable. For further details on dating of applications, see para 5.39.

(iv) Anticipation: Section 18

7.106 The powers of the Controller in cases of anticipation are discussed in paras 7.91 and 7.94. An order made under s 18 is appealable.

(v) Potential Infringement: Section 19

7.107 If the Controller is satisfied consequent to investigations required under the Patents Act that an invention in respect of which an application for a patent has been made cannot be performed without substantial risk of infringement of a claim of any other patent, the Controller may direct that a reference to the other patent shall be inserted in the applicant's complete specification by way of notice to the public, unless the applicant shows that there are reasonable grounds for contesting the validity of the said claim of the other patent, or the complete specification is amended to the satisfaction of the Controller. A reference shall not be made if there are reasonable grounds for contesting the claims of a previous specification. 4

⁹⁷ See Ford Motor Co Ltd's Application (1971) RPC 269, p 272, [1971] FSR 261, p 264.

⁹⁸ See MEP Studdert's Application (1952) 69 RPC 338.

⁹⁹ See Danieli AC Officine Maccaniche SPA v Controller of Patents and Designs (2000) 1 Cal LT 7 (HC), (2000) PTC 219.

¹ For details, see para 13.169.

² See RB & F's Application (1976) RPC 680 (CA).

³ Patents Act 1970, s 17(2).

⁴ See Ministry of Supply's Application (1955) 72 RPC 329, pp 331-32. The words 'reasonable grounds for contesting the validity of the said claim' does not require the Controller to make a decision on the validity of the claim. See also General Motors Corpn Patent [1966] FSR 373.

- 7.108 The applicant has to show that reasonable grounds for contesting the validity of the said claim in the other patent exist. Mere averment that his claim is valid will not suffice. Where the risk of infringement is plainly established, the Controller may allow for a reference to be inserted, even if the attack on the validity is 'too tenuous to be reasonably effective'.
- 7.109 Similarly, consequent to an investigation made under s 13 of the Patents Act, if it appears to the Controller that the applicant's invention cannot be performed without substantial risk of infringement of a claim of another patent, the applicant shall be informed about the same and an opportunity to amend the specification shall be given to the applicant as per the procedure in r 29 of the Patents Rules. A reference may also be made where the two patents have identical filing and priority dates, even if both are held by the same patentee. 8
- 7.110 The Controller may also order the deletion of such reference from the specification on an application of the applicant, in the following cases:⁹
 - (1) the other patent is revoked or otherwise ceases to be in force; or
 - (2) the specification of that other patent is amended by the deletion of the relevant claim; or
 - (3) in proceedings before the court or the Controller, the relevant claim of that other patent is found to be invalid or is not infringed by any working of the applicant's invention.

An order made under s 19 is appealable.

(a) Reference to Another Patent

7.111 The reference to another patent shall be inserted in the applicant's complete specification under s 19(1) in the following manner: 10

Reference has been directed, in pursuance of section 19(1) of the Patents Act, 1970, to Patent No...

(vi) Substitution of Applicants: Section 20

- 7.112 As stated earlier, the mechanism in s 20 of the Patents Act may be employed in settling entitlement disputes before the grant of a patent. By assignment or by operation of law, a person may become entitled to a patent or an interest of the applicant in a patent or to an undivided share in such patent or such interest. Such a person (claimant) may make a claim for substitution of an applicant or applicants (as the case may be) at any time before the grant of a patent in Form 6 along with the prescribed fees. ¹¹ The claimant shall produce the original assignment or agreement or an official copy or notarised copy of the original for the Controller's inspection and the Controller may also call for such other proof of title or written consent. ¹²
- 7.113 If the Controller is satisfied that by virtue of any assignment or agreement in writing made by the applicant for the patent or by operation of law, the claimant would be entitled to the patent or the interest of the applicant or to an undivided share of the patent or of that interest, the Controller may direct that the application shall proceed in the name of the claimant or in the names of the claimants and the applicants as the case may require.

(a) Kinds of Interest in an Application

- 7.114 Under s 20(1) of the Patents Act, a claimant may become entitled, by virtue of a written assignment or agreement or by operation of law, to:
 - (1) the patent;
 - (2) a specific interest in the patent;
 - (3) an undivided share in the patent; or
 - (4) a specific interest in the undivided share of the patent.
- 7.115 The first two instances pertain to cases where there is only one applicant. A claimant may become entitled to the patent when the sole applicant assigns the title in the patent. In such cases, the Controller may direct the application to proceed in the name of the claimant or claimants, as the case may be. Similarly, a claimant may become entitled to a specific interest in the patent when the sole applicant passes any of the interest in the patent by way of an agreement. In such cases, the Controller may direct that the application shall proceed in the joint names of the applicant and the claimant or claimants, as the case may be.

⁵ See *Hay's Application* (1970) RPC 14, p 21, where it was held that the application for patent involved a substantial risk of infringement of the prior patent and a reference was to be inserted in the absence of reasonable grounds for contesting the validity of the prior patent.

⁶ See Eastman Kodak Co's Application (1970) RPC 548, p 561, [1970] FSR 393, p 399; Pittsburg Plate Glass Co's Application (1969) RPC 628.

⁷ Patents Rules 2003, r 32.

⁸ See Ford Motor Co (Strosberg's) Patent [1969] FSR 424, (1970) RPC 74.

⁹ Patents Act 1970, s 19(2).

¹⁰ Patents Rules 2003, r 33.

¹¹ Patents Rules 2003, r 34(1).

¹² Ibid, r 34(2).

7.116 The last two instances pertain to cases involving more than one applicant. A claimant may become entitled to an undivided share of the patent when one of the applicants assigns his title to the claimant. In such cases, the Controller may direct that the application shall proceed in the name of the claimant and the other joint applicants. Similarly, a claimant may become entitled to a specific interest in the undivided share of the patent when one of the applicants passes any of his undivided interest in the patent to the claimant. The Controller may, in such cases, direct that the application shall proceed in the name of the claimant, that applicant and the other joint applicant or applicants, as the case may be.

(b) Conditions for Substitution

7.117 The Controller shall not issue a direction under s 20(1) by virtue of any assignment or agreement made by one of two or more joint applicants for a patent except with the consent of the other joint applicant or applicants. The above provision requires the consent of all the applicants for any assignment to take affect. The Controller shall not issue such a direction by virtue of any assignment or agreement for the assignment of the interest in an invention unless:¹³

- (1) the invention was identified by reference to the number of the application for the patent; or
- (2) an acknowledgement by the person by whom the assignment or agreement was made that the assignment or agreement relates to the invention in respect of which that application is made, is produced to the Controller; or
- (3) the rights of the claimant in respect of the invention have been conclusively established by the decision of a court; or
- (4) the Controller gives directions enabling the application to proceed or for regulating the manner in which it should be proceeded with under s 20(5).

(c) Death of an Applicant

7.118 Where one of the applicants for a patent dies at any time before the patent is granted, the Controller may, upon a request by the remaining applicant or applicants (survivor or survivors), direct the application to proceed in the name of the survivor or survivors alone. The consent of the legal representatives of the deceased applicant has to be procured before such a direction can be issued. Such a request shall be made in Form 6 and

shall be accompanied by proof of death of the joint applicant and a certified copy of the probate of the Will of the deceased or letter of administration or any other document to show that the person who gives the consent is the legal representative of the deceased applicant. ¹⁴ Section 20(4) allows for the legal representatives to give up their interest in the application.

(d) Disputes Between Applicants

7.119 In the case of any dispute between the joint applicants for a patent with regard to the manner in which the application should be proceeded, the Controller may, upon an application made to him in Form 6 by any of the applicants setting out the facts and the direction he seeks, give such directions for enabling the application to proceed in the name of one or more parties alone or for regulating the manner in which it should be proceeded, as the case may require.¹⁵

7.120 If the assignment or agreement in writing mentioned in s 20(1) contains an arbitration clause, the Controller may refer the matter to arbitration. The Controller has broad powers to issue directions with regard to entitlement proceeds. It is submitted that the power of the Controller under s 20(5) of the Patents Act would include the power to refer the matter to mediation or arbitration. An order made under s 20 is appealable.

(G) Time for Putting Application in Order: Section 21

7.121 As stated before, an application for a patent shall be deemed to have been abandoned if the applicant fails to comply with all the requirements imposed under the Patents Act within 12 months from the date on which the first statement of objection was issued to the applicant. The objections raised may pertain to the application or the complete specification or other documents. The expression 'other documents' will include any document filed as part of a convention application or an application filed under the Patents Cooperation Treaty designating India. An applicant shall not be deemed to have complied with the requirements under the Patents Act unless he has re-filed the said documents or proves to the satisfaction of the Controller that he is unable to re-file the said documents for reasons beyond his control. If the documents returned to the applicant during prosecution upon the requirement that they must be

¹⁴ Patents Rules 2003, r 35.

¹⁵ Patents Act 1970, s 20(5); Patents Rules 2003, r 36.

¹⁶ Patents Rules 2003, r 24B(4).

¹⁷ Patents Act 1970, s 21(1).

¹³ Patents Act 1970, s 20(3).

refiled before the end of the prescribed period or the extended period, the application would be deemed to have been abandoned if the said documents are not returned within the stipulated time. 18

7.122 The expression 'deemed to have' means 'treated for the purposes of this Act as if'. ¹⁹ An application shall not be deemed to have been abandoned so long as there is a possibility of the applicant to comply with the requirements. ²⁰ The Controller will have no power to revive such an application. ²¹

7.123 Section 21(2) provides for extension of time for putting the application in order in cases where an appeal is pending in respect of the application for the patent. The appellate authority may, on an application made by the applicant, extend the period for compliance as it deems fit. The applicant shall comply with the requirements within such period as granted by the appellate authority. The Controller may also extend the time to such further period, if the time within which an appeal mentioned under s 21(2) may be instituted has not expired. ²³

7.124 There appears to be some confusion with regard to the appellate authority mentioned in ss 21(2) and 21(3) of the Patents Act. Before the Patents (Amendment) Act 2002 came into force, the corresponding provisions in the Patents Act, ie ss 21(3) and 21(4), contemplated extension of time for compliance in case of an appeal pending before the high court. The Patents (Amendment) Act 2002 rightly substituted the expression 'High Court' with 'Appellate Board' as it replaced ch XIX of the Patents Act by providing for appeals to the Appellate Board. But when the Patents (Amendment) Act 2005 replaced s 21 entirely with the current provision, the old provisions of appeals to the high court seems to have inadvertently crept in. It is submitted that the words 'High Court' and 'Court' in ss 21(2) and 21(3) should be substituted by an appropriate amendment with 'Appellate Board' and 'Board' respectively.

SECRECY OF INVENTIONS

7.125 The Central Government may notify a class of inventions which are relevant for defence purposes. If the Controller is of the opinion that an application for patent belongs to the notified class or the invention appears to be so relevant, he may give directions for prohibiting or restricting the publication of information with respect to the invention. The Controller shall give notice of the application and such direction to the Central Government, on the receipt of which the Central Government shall consider whether the publication of the invention would be prejudicial to the defence of India. If the Central Government feels that the publication of the invention would not prejudice the defence of India, it shall give notice to the Controller to that effect, who shall revoke the directions and notify the applicant about the same. The controller is of the controller to that effect, who shall revoke the directions and notify the applicant about the same.

7.126 If the Central Government is of the opinion that the invention is relevant for defence purposes and finds that the Controller has not given any directions under s 35(1), it may, at any time, before the grant of the patent notify the Controller about the same. The Central Government's notice to the Controller shall have the same effect as if the invention were one of the classes notified by the Central Government under s 35(1). The Controller shall give notice of the directions issued by him to the Central Government.

(A) Periodic Review

7.127 The Central Government shall review the secrecy directions every six months or upon the request of the applicant. It shall determine whether the invention in respect of which secrecy directions were given continues to be relevant for defence purposes. If upon reconsideration, the Central Government is of the opinion that the invention would be no longer prejudicial to the defence of India or in the case of an application filed by a foreign applicant the invention is found to be published outside India, the Central Government may give notice to the Controller to revoke such directions. The result of every such reconsideration shall be communicated to the applicant within 15 days of the receipt of the notice of the Controller.²⁷

¹⁸ See D's Application [1974] FSR 291, p 298, (1975) RPC 447, p 453.

¹⁹ See Freeman and Heatrae Ltd's Application (1959) RPC 25, p 28; V's Application (1981) RPC 245, p 251.

²⁰ See Associated British Combustion Ltd's Application (1978) RPC 581, p 591, [1978] FSR 289.

²¹ See *T's Application* [1982] FSR 172 (CA). The Comptroller did not have discretion to revive the application under r 100 of the UK Patents Rules 1978.

²² Patents Act 1970, s 21(2).

²³ Ibid, s 21(3).

²⁴ Patents Act 1970, s 35(1).

²⁵ Ibid, s 35(2).

²⁶ Ibid, s 35(3).

²⁷ Patents Rules 2003, r 72(1).

(B) Effect of Secrecy Directions

7.128 The effect of secrecy directions passed under s 35 is that so long as such directions are in force, the Controller shall not pass an order refusing to grant an application is respect of which the directions are passed. Similarly, no appeal shall lie from any order of the Controller passed under s 35. However, the application in respect of which secrecy directions are passed may proceed up to the stage of grant of the patent but the application or the specification shall not be published and no patent shall be granted on that application. ²⁸

7.129 Where a complete specification is found to be in order for the grant of the patent during the continuance in force of the directions, if any use of the invention is made by the Central Government, the provisions of ss 100, 101 and 103 shall apply in relation to such use as if the patent had been granted for the invention. Where a complete specification is found to be in order for the grant of the patent during the continuance in force of the directions, if it appears to the Central Government that the applicant for the patent has suffered hardship on account of the continuance of such direction, the Central Government may pay him reasonable compensation having regard to the novelty and utility of the invention and other factors. No renewal fee shall be payable for the period during which secrecy directions were in force in respect of a patent which was subject to directions under s 35. 31

(C) Extension of Time

7.130 The Controller may extend the time for doing anything required or authorised to be done by or under the Patents Act in connection to an application with regard to which secrecy directions issued under s 35 is revoked, whether or not the stipulated time has already expired. ³² Such extension shall not exceed the period for which directions given by the Central Government under s 35(1) were in force. ³³

(D) Restriction on Foreign Applications

7.131 Section 39 of the Patents Act restricts persons residing in India from making any application outside India for the grant of a patent for an

invention. A resident may make an application outside India under the authority of a written permit sought for in Form 25 and granted by the Controller if two conditions are satisfied, ie, (1) an application for a patent for the same invention has been made in India, not less than six weeks before the application outside India; and (2) either no direction has been given under sub-s (1) of s 35 in relation to the application in India, or all such directions have been revoked.³⁴

7.132 The Controller shall dispose of every such application within 21 days, except in the case of inventions relating to defence and atomic energy applications.³⁵ In case the invention is relevant for defence purpose or atomic energy, the Controller shall not grant permit without the prior consent of the Central Government. Section 39 shall not apply in relation to an invention for which an application for protection has first been filed in a country outside India by a person resident outside India.

(E) Contravention of Sections 35 and 39

7.133 In the case of an application for a patent, any person who contravenes a direction as to secrecy given by the Controller under s 35 or makes an application for grant of a patent outside India in contravention of s 39, the application for patent under the Patents Act shall be deemed to have been abandoned and if the patent is granted it shall be liable for revocation under s 64(1)(n).³⁶

7.134 The directions given and orders passed under ch VII are not appealable. All orders of the Controller giving directions as to secrecy as well as all orders of the Central Government shall be final and shall not be called in question in any court on any ground.³⁷ Nothing in the Patents Act shall prevent the Controller from making disclosures to the Central Government for the purposes of ch VII.³⁸

²⁸ Patents Act 1970, s 37(1).

²⁹ Ibid, s 37(2)(a).

³⁰ Ibid, s 37(2)(b).

³¹ Ibid, s 37(3).

³² Ibid, s 38.

³³ Patents Rules 2003, r 72(2).

³⁴ Patents Rules 2003, r 71(1).

³⁵ Patents Act 1970, s 39(2); Patents Rules 2003, r 71(2).

³⁶ Ibid, s 40.

³⁷ Ibid, s 41.

³⁸ Ibid, s 42.