

IP Australia's response to C. 8403

- Requirements of Inventive Step and Sufficiency of Disclosure in Australia.

Inventive step

Section 18(1)(b)(ii) of the Patents Act 1990 provides that a standard patent may be granted for a claimed invention that, among other things, when compared with the prior art base as it existed before the priority date of a claim, involves an inventive step.

18 Patentable inventions

Patentable inventions for the purposes of a standard patent

- (1) Subject to subsection (2), an invention is a patentable invention for the purposes of a standard patent if the invention, so far as claimed in any claim:
 - (a) is a manner of manufacture within the meaning of section 6 of the Statute of Monopolies; and
 - (b) when compared with the prior art base as it existed before the priority date of that claim:
 - (i) is novel; and
 - (ii) involves an inventive step; and

Australia has recently amended its law on inventive step following the implementation of *the Intellectual Property Laws Amendment (Raising the Bar) Act 2012*, which aligned Australian law more closely with other jurisdictions. For standard patent applications with an examination request filed on or after 15 April 2013, Section 7 of the *Patents Act 1990* provides:

- (2) For the purposes of this Act, an invention is to be taken to involve an inventive step when compared with the prior art base unless the invention would have been obvious to a person skilled in the relevant art in the light of the common general knowledge as it existed (whether in or out of the patent area) before the priority date of the relevant claim, whether that knowledge is considered separately or together with the information mentioned in subsection (3).
- (3) The information for the purposes of subsection (2) is:
 - (a) any single piece of prior art information; or
 - (b) a combination of any 2 or more pieces of prior art information that the skilled person mentioned in subsection (2) could, before the priority date of the relevant claim, be reasonably expected to have combined.

Please see section 2.5.1.2A of the Patent Manual of Practice & Procedure

http://www.ipaustralia.gov.au/pdfs/patentsmanual/WebHelp/Patent_Examiners_Manual.htm

(i) Definition of person skilled in the art

The person skilled in the art:

- is a skilled but non-inventive worker in the relevant field of technology;
- knows the common general knowledge in the art;
- could be anyone from a tradesman in some arts to a highly qualified scientist in others depending on the nature of the problem; and
- could be a team of people.

See, for example, *Root Quality Pty Ltd v Root Control Technologies Pty Ltd* 49 IPR 225, *American Cyanamid v Ethicon Ltd* (1979) RPC 215 and *Sunbeam Corp v Morphy-Richards (Aust) Pty Ltd* (1961) ALJR 212.

Please see section 2.5.2.4A of the Patent Manual of Practice & Procedure

http://www.ipaustralia.gov.au/pdfs/patentsmanual/WebHelp/Patent_Examiners_Manual.htm

(ii) Methodologies employed for evaluating the inventive step

The method used to evaluate inventive step is essentially that set out in subsections 7(2) and 7(3), reproduced above.

Under the provisions of subsections 7(2) and 7(3) of the Patents Act 1990, an invention is taken to involve an inventive step when compared with the prior art base unless it would have been obvious to a person skilled in the art. 'Obvious' means 'very plain' (*Lockwood Security Products Pty Ltd v Doric Products Pty Ltd* (No 2) [2007] HCA 21 at [51]-[52]; (2007) 72 IPR 447 at 461 [51] -[52]). The invention must be obvious in the light of the common general knowledge as it existed in the patent area before the priority date, either on its own or together with information in a document, or a combination of documents that the person skilled in the art could, before the priority date of the relevant claim, be reasonably expected to have combined.

(iii) Having regard to the prior art, the level of inventiveness (obviousness) to meet the inventive step requirement.

The test for obviousness was set by the High Court of Australia Aickin J in *Wellcome Foundation Ltd v VR Laboratories (Aust) Pty Ltd* (1981) 148 CLR 262 at page 286.

"The test is whether the hypothetical addressee faced with the same problem would have taken as a matter of routine whatever steps might have led from the prior art to the invention, whether they be the steps of the inventor or not."

Consistent with *Wellcome*, more recently the High Court in *Aktiebolaget Hässle v Alphapharm Pty Ltd* [2002] HCA 59 at [51]-[53]; 212 CLR 411 approved the 'reformulated Cripps question' posed by Graham J in *Olin Mathieson Chemical Corporation v Biorex Laboratories Ltd* [1970] RPC 157 at 187.

"Would the notional research group at the relevant date in all the circumstances ... directly be led as a matter of course to try [the invention claimed] in the expectation that it might well produce a useful [result or alternative]."

Where the claimed invention lies in a combination of features, the question is whether the combination, not each individual feature, is obvious when compared to the prior art base (*Alphapharm* (supra) at [41]; *Minnesota Mining & Manufacturing Co v Beiersdorf (Australia) Ltd (Minnesota Mining)* [1980] HCA 9 at [116]; (1980) 144 CLR 253 at 293):

"In the case of a combination patent the invention will lie in the selection of integers, a process which will necessarily involve rejection of other possible integers. The prior existence of publications revealing those integers, as separate items, and other possible integers does

not of itself make an alleged invention obvious. It is the selection of the integers out of, perhaps many possibilities, which must be shown to be obvious."

The *Wellcome* test above supports the use of the "problem-solution" approach, where appropriate, when considering whether a claimed invention is obvious in light of the common general knowledge in the art alone, or in combination with the prior art base. The "problem-solution" approach is based on the question of whether the claimed invention would have been obvious to a person skilled in the relevant art when faced with a particular problem. The approach is the preferred one to apply when considering inventive step, as it reduces the risk of *ex post facto* analysis. The problem-solution approach also ensures that the examiner's consideration of whether a claim lacks an inventive step is valid and sustainable; and identifies all the issues relevant to establishing lack of inventive step.

Please see sections 2.5.1.5 and 2.5.1.6A of the Patent Manual of Practice & Procedure
http://www.ipaustralia.gov.au/pdfs/patentsmanual/WebHelp/Patent_Examiners_Manual.htm

The courts have had regard to a number of indicators when considering whether the subject matter of a claim is obvious. These include long felt need, failure of others, complexity of work, whether or not a worthwhile line of development, copying of invention in preference to prior art and commercial success.

If a claim solves a "long felt need", there is a presumption that it is not obvious, as other inventors must have also tried to solve the need and not succeeded:

"... the question of obviousness is probably best tested, if this be possible, by the guidance given by contemporaneous events. ... If an invention has resulted in the solution of a problem which has been troubling industry for years and achieves immediate success upon its introduction, then the suggestion after the event that the step was obvious inevitably rings a little hollow."

Lucas and Another v Gaedor Ltd and Others (1978) RPC 297 at page 358.

If other inventors have tried to solve a problem and were not successful, a claim will likely involve an inventive step:

"...when I find that the person who has made the invention, himself being a person skilled in the art, has had to take time and make experiments before he arrived at the solution that it is a solution which has apparently been sought for many years by various persons and has not been arrived at ... then I think in the light of that evidence the prima facie view which one might take ... and I do in this case come to the conclusion, that on the whole there is sufficient here to support the patent."

Howaldt Ld v Condrupe Ld (1937) 54 RPC 121 at page 133.

and:

"Dozens of inventors, and no doubt others as well, had tried and failed to find a satisfactory solution. It is not credible that this should have happened if the problem only needed workshop experiments to solve it."

Technograph v Mills (1972) RPC 346 at page 353.

If the work undertaken by an inventor in order to produce an invention was particularly complex, and not readily carried out, this is an indication that it was not a matter of routine. In such cases the invention would not be obvious.

"The tracing of a course of action which was complex and detailed, as well as laborious, with a good deal of trial and error, with dead ends and the retracing of steps is not the taking of routine steps to which the hypothetical formulator was taken as a matter of course."

Aktiebolaget Hassle v Alphapharm Pty Ltd [2002] HCA 59 at [58]

This is different to cases of "mere verification", where an inventor merely follows the teaching of the prior art (even if that teaching is complex) to achieve the expected result. In this regard, note *Sharp & Dohme Inc v Boots Pure Drug Co Ltd* (1928) 45 RPC 153 at 192.

If a line of development has not been favoured by those in the art, the age of the prior art may give a distorted picture of what is obvious:

"This may act as commercial constraint which will reduce his willingness to embark on certain lines of development. Indeed the cost of retooling may be such that he will not consider the rewards which would flow from the improved product would justify the change. These purely commercial considerations are likely to affect the direction, if any, in which the established manufacturer may go. However they give a distorted picture of what, from a technical and patent point of view, is obvious. As I have said, a new entrant into the trade may well have different commercial constraints. The court has to be alert to the difference between commercial attractiveness and technical obviousness. They are not always the same."

And later, on the age of prior art:

"It is only when the answer to the question "why was this not developed earlier" is "a likely and reasonable answer is that people looking for a way around an existing problem did not see this as part of the answer" that the age of the prior art should play a part in meeting an obviousness attack. If it was likely that in the real world no one was looking for an answer the fact that none was found says nothing about whether the answer proposed in the patent under attack was obvious."

Brugger & Ors v Medic-Aid Ltd [1996] RPC 635 at page 653-655

Copying of the invention in preference to the prior art is indicative of an inventive step:

"when once it has been found ... that the problem had waited solution for many years, and that the device is in fact novel and superior to what had gone before, and has been widely used, and used in preference to alternative devices, it is ... practically impossible to say that there is not present that scintilla of invention necessary to support the Patent No evidence is more cogent of the success of the invention than that the defendants simply copied it and made profits by making and selling the products."

Samuel Parkes & Co Ltd v Cocker Brothers Ltd (1929) 46 RPC 241 at page 248

and:

"The fact that some of the defendant companies purchased large quantities ... of the plaintiff's windows and subsequently manufactured themselves an article which can only be described as a copy in all material respects, demonstrates the existence of the kind of public need which is relevant to the question of obviousness."

Meyers Taylor Pty Ltd v Vicarr Industries Ltd (1977) CLR 228 at page 239

Commercial success is indicative (but not conclusive) of an inventive step:

"Commercial success can never of itself be decisive of inventiveness but it is a material matter, the weight of which must be determined by reference to all the surrounding circumstances."

Meyers Taylor Pty Ltd v Vicarr Industries Ltd (1977) CLR 228 at page 239.

and:

"Commercial success is, of course, not of itself conclusive on an issue of obviousness, but it has been treated in case after case as a valuable weight in favour of the patent."

General Tire & Rubber Company v Firestone Tyre and Rubber Company Ltd (1972) RPC 457 at page 503.

Please see sections 2.5.3.10 of the Patent Manual of Practice & Procedure

http://www.ipaustralia.gov.au/pdfs/patentsmanual/WebHelp/Patent_Examiners_Manual.htm

Sufficiency of Disclosure

Australia recently amended its law surrounding the requirement to describe the invention fully following the implementation of *the Intellectual Property Laws Amendment (Raising the Bar) Act 2012*. For standard patent applications with an examination request filed on or after 15 April 2013, Section 40 of the *Patents Act 1990* relevantly provides that:

- (1) A provisional specification must disclose the invention in a manner which is clear enough and complete enough for the invention to be performed by a person skilled in the relevant art.
- (2) A complete specification must:
 - (a) disclose the invention in a manner which is clear enough and complete enough for the invention to be performed by a person skilled in the relevant art; and
 - (aa) disclose the best method known to the applicant of performing the invention; and
 - (b) where it relates to an application for a standard patent—end with a claim or claims defining the invention; and
 - (c) where it relates to an application for an innovation patent—end with at least one and no more than 5 claims defining the invention.
- (3) The claim or claims must be clear and succinct and supported by matter disclosed in the specification.

The current legislation is intended to align the disclosure requirement with that applying in other jurisdictions, such as the United Kingdom and Europe, with the effect that sufficient information must be provided to enable the whole width of the claimed invention to be performed by the skilled person without undue burden, or the need for further invention.

See Intellectual Property Laws Amendment (Raising the Bar) Bill 2011 [2012] Explanatory Memorandum

http://parlinfo.aph.gov.au/parlInfo/search/display/display.w3p;query=Id%3A%22legislation%2Fems%2Fs837_ems_561ef790-9811-43d0-b14f-04c924723c94%22

(i) Enabling disclosure requirement

Both sec 40(2)(a) and sec 40(3) require the specification to provide an enabling disclosure of the claimed invention. Under sec 40(2)(a), the clear enough and complete enough (enabling) disclosure must be found in the complete specification. In contrast, for sec 40(3), the enabling disclosure supporting the claims must be found in the body of the specification (the description and any drawings and sequence listing).

To fulfil the requirements for an enabling disclosure, the relevant parts of the specification must provide sufficient information such that the person skilled in the art can, on the basis of the information disclosed in the application as filed and the common general knowledge in the art, perform the invention over the whole width of the claims, without undue burden or the need for further invention.

In *Biogen v Medeva* [1997] RPC 1 at 48 Lord Hoffmann explained the concept of an enabling disclosure:

“... the specification must enable the invention to be performed to the full extent of the monopoly claimed. If the [specification] discloses a principle capable of general application, the claims may be in correspondingly general terms. The [applicant] need not show that he has proved its application in every individual instance. On the other hand, if the claims include a number of discrete methods or products, the [applicant] must enable the invention to be performed in respect of each of them.”

Please see sections 2.11.3A, 2.11.4A and 2.11.3.4.2A (via 2.11.3A) of the Patent Manual of Practice & Procedure

http://www.ipaustralia.gov.au/pdfs/patentsmanual/WebHelp/Patent_Examiners_Manual.htm

(ii) Support requirement

The support requirement introduced in the *Intellectual Property Laws Amendment (Raising the Bar) Act 2012* mirrors the support requirements in the *European Patent Convention* and the United Kingdom *Patents Act 1977*.

As indicated above, subsection 40(3) requires the claimed invention to be supported by an enabling disclosure in the body of the specification (i.e. the description, together with any drawings and sequence listing). Please refer to (i) above for the requirements for an enabling disclosure.

Additionally, a claim will lack support where there is a serious inconsistency between what is claimed and the description of the invention and its stated objects and benefits. A serious inconsistency (other than a lack of enablement) does not arise merely because an invention is claimed more broadly than it is described, for example, because a feature not mentioned in the claims is found in a consistory statement or the described embodiments. However, where it is apparent from the

information in the body of the specification that a particular feature is missing from the claims that is clearly essential to how the described invention works and achieves its stated benefits, then an objection that the claim is not supported is appropriate even if the disclosure of the specification is sufficient to enable what is claimed.

Please see section 2.11.7A, 2.11.7.2A and 2.11.7.3A (via 2.11.7A) of the Patents Examiner Manual http://www.ipaustralia.gov.au/pdfs/patentsmanual/WebHelp/Patent_Examiners_Manual.htm

(iii) Written description requirement

As indicated above, subsections 40(2)(a) and 40(3) each require the relevant parts of the specification to provide an enabling disclosure of the claimed invention. Please refer to the explanation at (i) above.

Please see section 2.11.3A, 2.11.7A of the Patents Examiner Manual http://www.ipaustralia.gov.au/pdfs/patentsmanual/WebHelp/Patent_Examiners_Manual.htm

Section 40(2)(aa) requires the complete specification to disclose the best method known to the applicant of performing the invention. This provision ensures that the patentee does not deliberately keep to himself something novel and not previously published which he knows gives the best results, with a view to getting the benefit of a monopoly without giving to the public the best method of performing the subject of the monopoly. See *American Cyanamid Company v Ethicon Limited* (1979) RPC 215 at page 269.

The best method requirement is assessed on the basis of the applicant's knowledge at the time of filing the complete specification (*Rescare Ltd. v Anaesthetic Supplies Pty. Ltd.*, 25 IPR 119). If the applicant identifies a better method at a time subsequent to filing, there is no obligation to amend the specification to include that method. A 'best method of performance' need not be a specific exemplification of the invention, simply sufficient instruction for the skilled worker to put the claimed invention into effect.

The question of whether the applicant has provided the best method of performing the invention is necessarily one of fact and evidence, with the knowledge of relevant facts inherently lying with the applicant.

Please see section 2.11.3.17A (via 2.11.3A) of the Patents Examiner Manual http://www.ipaustralia.gov.au/pdfs/patentsmanual/WebHelp/Patent_Examiners_Manual.htm