

Public Consultation Amending the inventive step requirements for Australian patents

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Contents

Introduction.....	1
Privacy Notice.....	1
Part 1: Inventive Step.....	3
Background.....	3
Policy Considerations.....	4
Options.....	5
Part 2: Technical Features.....	11
Background.....	11
Policy Considerations.....	11
Options.....	12
Part 3: Transitional arrangements.....	16
Policy Considerations.....	16
Options.....	16
Questions for consultation.....	18
Attachment A – Assessing inventive step.....	19
Overview.....	19
Australian approach to assessing inventive step.....	19
EPO approach to assessing inventive step.....	20
Differences between EPO and Australian problem and solution approach.....	21

Introduction

IP Australia's objective is to implement the Australian Government's response to Recommendations 7.2 and 7.3 of the Productivity Commission (PC) *Inquiry into Australia's intellectual property arrangements*¹ that relate to the inventive step for patents.

The purpose of this paper is to seek feedback on options for implementing these recommendations. The options relate to reforms to the inventive step itself (Part 1), amendments to the requirement of the technical features in a patent application (Part 2), and associated transitional arrangements (Part 3).

The paper discusses the pros and cons of each option but does not propose preferred options at this stage. IP Australia intends to use this process to gain further information before forming a view.

IP Australia invites interested parties to make written submissions in response to the questions presented in this paper by **Friday, 17 November 2017**.

IP Australia will consider the submissions, and undertake further consultation during the legislation drafting process.

Written submissions should be sent to consultation@ipaaustralia.gov.au.

For accessibility reasons, please submit responses by email in Word, RTF, or PDF format.

The contact officer is Lisa Bailey, who may be contacted on (02) 6222 3695, or via email on Lisa.Bailey@ipaaustralia.gov.au.

This paper is also available at:

www.ipaustralia.gov.au/about-us/public-consultation

Submissions should be received no later than 17 November 2017.

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¹ PC 2016, *Intellectual Property Arrangements*, Inquiry Report No. 78, Canberra.

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Part 1: Inventive Step

Background

The objective of the *Intellectual Property Laws Amendment (Raising the Bar) Act 2012* (Raising the Bar Act) was to introduce a range of improvements across Australia's intellectual property (IP) system, making refinements to existing arrangements and implementing new initiatives aimed at increasing efficiency and effectiveness. In particular, the Raising the Bar Act aimed to raise the standards for the grant of a patent to be equivalent to international best practice, including raising the standard set for inventiveness and disclosure of an invention, bolstering the requirement that a patented invention be useful, and increasing certainty in the validity of granted patents.

In relation to inventive step, the Raising the Bar Act broadened the scope of the prior art base by removing the geographical limitation on common general knowledge, and the requirement that prior art documents be limited to only those documents that would have been 'ascertained, understood and regarded as relevant' by the skilled person. These amendments ensured that all information that was publicly available at the priority date of the claimed invention is taken into account and increase consistency between the standard test for inventive step in Australia and elsewhere.

The PC considered (Finding 7.1) that:

The Raising the Bar initiative moved the inventive step and other elements of patent law in the right direction by raising the threshold for granting a patent. There is a strong case, however, for further raising the threshold.

The PC considered that the Australian patent system could be more effective at encouraging socially valuable innovations.² The threshold level of inventive step was considered by the PC to be too low in Australia, and raising it would have the effect of encouraging 'genuine innovations' while lowering the social and economic costs from granting patents on 'low-value' inventions.³

The PC noted that the Australian inventive step threshold should be raised, at a minimum, to meet the highest threshold set by any country with which Australia conducts substantial technology trade.⁴ The PC also considered that the threshold for inventive step used by the European Patent Office (EPO) was more effective at 'filtering out low-value patents than patent offices in other large markets for technology',⁵ and therefore recommended that Australia's standard should match it.

Recommendation 7.2 of the PC's report stated:

² Ibid, p 82.

³ The PC estimated that raising the threshold would result in about 700–800 fewer 'low-value' patents granted each year (equivalent to about 4.5 per cent of annual patents granted). See, *ibid*, p 228.

⁴ Ibid, p 225.

⁵ Ibid, p 221.

The Australian Government should amend ss. 7(2) and 7(3) of the Patents Act 1990 (Cth) such that an invention is taken to involve an inventive step if, having regard to the prior art base, it is not obvious to a person skilled in the relevant art. The Explanatory Memorandum should state:

- *a ‘scintilla’ of invention, or a scenario where the skilled person would not ‘directly be led as a matter of course’, are insufficient thresholds for meeting the inventive step*
- *the ‘obvious to try’ test applied in Europe would in some instances be a suitable test.*

IP Australia should update the Australian Patent Office Manual of Practice and Procedure such that it will consider the technical features of an invention for the purpose of the inventive step and novelty tests.

In its response to the PC’s report, the Australian Government supported the PC’s recommendation on inventive step. The Government noted that it is desirable that the Australian threshold for inventive step is consistent with international best practice and that the Raising the Bar Act reforms had this as a stated policy goal. While that Act broadened the scope of the prior art base to be used in assessing inventive step, the fundamental threshold test for inventive step established by Australian courts remained unchanged.

While the Government recognises that the differences between assessment of inventive step in the EPO and in Australia will in many cases not result in a material difference to the patent claims that are ultimately granted, there could be some cases where the standard in Australia is lower than in Europe. Furthermore, due to the language of Australian statute and case law there is a perception that Australian law on inventive step is weaker than other jurisdictions.

The Government therefore intends to build on the Raising the Bar Act, and take this opportunity to align the threshold of inventive step in Australia with the threshold of inventive step used by the EPO. A number of options are presented below for consideration.

Background information on the assessment of inventive step can be found in **Attachment A**.

Policy Considerations

There are a range of policy considerations relevant to the implementation of the PC’s recommendation on inventive step. IP Australia aims to balance these considerations in any option taken.

Adaptability

Like most legal tests, the assessment of inventive step needs to strike a balance between predictability of outcomes, and the adaptability to consider principles rather than rigid formulae. The PC recommended adaptability as one of the recommended guiding principles in formulating IP policy.⁶ An adaptable, principles-based approach is desirable for the assessment of patents, as it recognises that each invention and the circumstances surrounding it are different. Adaptability has allowed patent law to evolve to take account of new technologies and practices.⁷ However, there is always the risk that case law may develop such that a particular element of the legislation no longer fulfils its original policy objective. The principles of the Australian common-law legal tradition recognise the need for a level of consistency and predictability in legal decision-making.

⁶ PC 2016, *Intellectual Property Arrangements*, Inquiry Report No. 78, Canberra, pages 70-71

⁷ For example, the Ergas review considered that ‘Australia has on the whole benefited from the adaptiveness and flexibility that has characterised the manner of manufacture test.’ See: IP and Competition Review Committee, *Final report of the Review of intellectual property legislation under the Competition Principles Agreement*, 2000, pp 148-149. Available at: https://www.ipaustralia.gov.au/sites/g/files/net856/f/ergas_report_september_2000.pdf

Use of extrinsic materials versus legislation

While legal tests can be incorporated directly into the text of an Act, they can also be indicated in the extrinsic materials (such as the Explanatory Memorandum) as the intended interpretation.⁸ Related to the above consideration there is a balance to be struck between the flexibility and breadth of the words in the Act compared to the extrinsic materials, and how much interpretation should be left to the courts.

Differences between court and examination consideration of inventive step

Courts have the scope to conduct their inquiry into a question of inventive step, based on the considerable evidence they have available. The Commissioner of Patents' consideration in examination will necessarily have less evidence available, and may therefore benefit more from clear procedures that are intended to raise the standard of inventive step. Care needs to be taken to ensure that such procedures do not unnecessarily constrain the Commissioner of Patents (the Commissioner) to consider matters that the court can disregard as this might result in the Commissioner being forced to give a finding of inventive step that a court will invariably overturn. It could also result in greater uncertainty in how the Commissioner will interpret and apply subsequent court decisions on inventive step.

Options

Four options are presented for amending Australia's inventive step threshold, noting that IP Australia has not yet formed a view on the preferred option for implementing the PC's recommendation:

- Option IS-1: Implement the PC recommendation verbatim
- Option IS-2: Implement Option IS-1 with clarification of prior art base and interpretation
- Option IS-3: Implement Option IS-2 with amendments to Section 45 to codify that the Commissioner must determine if an invention is a solution to a technical problem
- Option IS-4: Enshrine the EPO problem-and-solution approach in the Patents Act

Option IS-1: Implement the PC recommendation verbatim

Summary

Under this option, the PC's recommendation would be implemented *verbatim*. This would result in the definition of inventive step in the Patents Act being based on Article 56 of the European Patent Convention (EPC) and the explanatory memorandum (EM) providing some additional guidance.

Legislative change

Section 7(2) of Patents Act would be amended to state:

An invention is taken to involve an inventive step if, having regard to the prior art base, it is not obvious to a person skilled in the relevant art.

Part of the intent of the PC's recommendation was to take the more complex wording out of the Patents Act and rely more heavily on examination guidance, as per the EPO approach⁹. As such, the text of the test for inventive step proposed by the PC was intended to be all that was necessary to define inventive step in the Act. Therefore the definition of 'prior art base' in section 7(3) would be repealed, with the understanding of what constitutes relevant prior art being provided in examination guidance in the form of the Australian Patent Office Manual of Practice and Procedure (MPP).

⁸ Section 15AB of the *Acts Interpretation Act 1901*

⁹ PC report page 224

Guidance

As recommended by the PC, the EM would state that:

- a ‘scintilla’ of invention, or a scenario where the skilled person would not ‘directly be led as a matter of course’, are insufficient thresholds for meeting the inventive step, and
- the ‘obvious to try’ test applied in Europe would in some instances be a suitable test.

The MPP would be amended to state that the Commissioner will consider the technical features of an invention for the purposes of the inventive step test. The PC also recommended that this be considered in relation to the novelty test. However, the Commissioner already disregards features that do not materially affect the way the invention works.¹⁰ No amendments to the MPP in relation to the novelty test would be made.

Discussion

This approach would make the legislation as simple as possible, however there are potential problems with it that would prevent it from achieving the PC’s desired effect. While simplicity of legislation can be desirable for the sake of adaptability, the composition of the ‘prior art base’ in Australia is explicitly defined in legislation as a result of the case law history of inventive step.

For example, in the *Patents Act 1952*, revocation of a patent on the grounds of lack of inventive step was available if: ‘The invention, so far as claimed in any claim, was obvious and did not involve an inventive step, having regard to what was known or used in Australia on or before the priority date of that claim’.¹¹ The phrase ‘having regard to what was known or used in Australia’ (i.e. the prior art base) was construed by the High Court of Australia as meaning the common general knowledge in the art only.¹² Information from prior published documents, even if it would be readily found by the skilled person, was excluded from the prior art base for establishing inventive step unless it could be proved to be well-known in the art.

The *Patents Act 1990* addressed this issue by explicitly incorporating a definition of the prior art base into the Act. As such, given existing legal precedent there is a risk that removal of an explicit definition of ‘prior art base’ in the Act could result in additional uncertainty around its scope for the purposes of assessing inventive step.

A further risk is that the PC’s characterisation of the ‘scintilla’ of invention as a threshold standard for inventive step may be incorrect. The principle of ‘a scintilla of invention’ is generally intended to convey that the test for obviousness is that either an inventive step is present or it is not, and not question of degree¹³. As such, the inclusion of the PC’s text in the explanatory memorandum may not achieve what is intended by the PC.

The PC’s recommended wording is substantially similar to the current wording in the first part of section 7(2) of the Patents Act. The PC recognised this by including in its recommendation the need for guidance on the interpretation of the wording. In practice, this guidance may not be enough to ensure that the courts use the EPO approach rather than refer back to previous Australian case law on inventive step. This may result in little difference in practice from the current interpretation. This includes in relation to the assessment of technical features of the invention.

¹⁰ Patents Manual of Practice and Procedure 2.4.8.4

¹¹ *Patents Act 1952*, Paragraph 100(1)(e)

¹² *Minnesota Mining & Manufacturing Co v Beiersdorf (Australia) Ltd* [1980] HCA 9

¹³ *AstraZeneca AB v Apotex Pty Ltd; AstraZeneca AB v Watson Pharma Pty Ltd; AstraZeneca AB v Ascent Pharma Pty Ltd* [2015] HCA 30 at [12]

Option IS-2 presents an alternative that would provide clearer guidance in interpretation to help achieve the PC's intended outcome.

Option IS-2: Implement Option IS-1 with clarification of the prior art base and interpretation

Summary

Under this option, the PC's recommendation would be implemented with additional clarifying amendments to help ensure the desired effect is achieved. The definition of inventive step in the Patents Act would be amended to match the EPC definition. Both sections 7(2) and 7(3) of the Patents Act would be amended, and the EM would provide additional guidance on the intended effects of the change.

Legislative change

Section 7(2) of Patents Act would be amended based on Art 56 of the EPC to state:

An invention is considered as involving an inventive step if, having regard to the prior art base, it is not obvious to a person skilled in the relevant art.

To address the PC's intent of reducing the complexity of the inventive step legislation, the prior art base definition for inventive step in Schedule 1 would be redrafted. This would reduce legislative complexity, but is not intended to change the information considered for the purposes of determining whether or not an invention involves an inventive step.

In detail, these amendments would include the information that is largely in the second part of section 7(2) and in section 7(3) such that the prior art base for inventive step includes:

- any single piece of information; or
- a combination of any two or more pieces of information that the skilled person mentioned in subsection (2) could, before the priority date of the relevant claim, be reasonably expected to have combined; and
- 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 above.

The definition of 'prior art information' for the purposes of subsection 7(3) in Schedule 1 would be repealed, as it would be redundant.

Guidance

To provide clearer guidance than Option IS-1, the EM would go into detail about the EPO approach and its interpretation, including an explanation of the full problem-and-solution approach that the PC proposed be applied in Australia. The EM would state that:

- The wording is similar to Art 56 (and Art 54(2)) of the EPC, and as such is intended to be interpreted in a similar way.
- The fundamental question remains: 'at the time of the priority date, was the claimed invention obvious to the skilled person in the art, in the light of the prior art?'
- The problem-and-solution approach as established by the EPO technical boards of appeal would normally be a suitable approach to answering this question.

- When using the problem-and-solution approach, the question to be answered is whether the skilled person would, when faced with the objective technical problem, be prompted to modify or adapt the closest prior art to arrive at the invention, with a reasonable hope of solving the problem.¹⁴

As with Option IS-1, the MPP would be amended to state that the Commissioner will consider the technical features of an invention for the purposes of the inventive step test, but amendments would not be made for novelty for the same reasons as above. The additional guidance in the EM explicitly endorsing the EPO problem-and-solution approach would ensure that it is clear that technical features are usually intended to be considered in the assessment of inventive step.

Discussion

Relative to Option IS-1, this approach provides some additional clarity in both the legislation and extrinsic materials, rather than leaving the bulk of the interpretation to the MPP and the courts.

Under this approach, examination outcomes should be the same as the EPO in most cases, because the explanatory material will endorse the full EPO problem-and-solution test in most cases. However, this option provides some adaptability for the Commissioner to use other tests where the EPO problem-and-solution approach is not considered appropriate. It also allows the courts to answer the question of inventive step from first principles according to the available evidence, rather than following a rigid formula. This provides room for the interpretation of the law to evolve with new case law and technology and also any changes to the EPO approach over time.

The same approach will apply in IP Australia and the courts, allowing the Commissioner to directly apply court precedent on inventive step as it evolves.

The flexibility available under this option could mean less predictability in examination and court outcomes and that there will still be instances where Australian prosecution outcomes differ from the EPO. For example, without explicit reference in the Australian legislation to an invention being of technical character, courts could still consider non-technical features to contribute to an inventive step in some cases.

The redrafting of the definitions of prior art base is intended to streamline the legislation, while ensuring that the advantages of codifying the prior art remain. The intention is that all prior-published documents, along with the common general knowledge in the art, will remain relevant prior art for determining inventive step, in common with the EPO. In addition, the express ability to combine two or more documents provides for the purposes of determining the prior art may be beneficial, for example in situations where there is no single piece of 'closest prior art'.

Option IS-3: Implement Option IS-2 with amendments to Section 45 to codify that the Commissioner must determine if an invention is a solution to a technical problem

Summary

Option IS-2 above is intended to provide some flexibility in relation to applying tests other than the EPO's problem-and-solution approach. It follows that there will still be room for Australian prosecution outcomes to be different from the EPO.

This option seeks to leave some flexibility to the courts, while bringing the Commissioner's consideration of inventive step into line with the EPO. This could have the advantage, as discussed above, of providing

¹⁴ See section 5.3 of the EPO Guidelines for Examination, available at: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_vii_5_3.htm

clearer and more predictable outcomes for examination, while allowing the courts to diverge if they consider that the EPO's approach is not appropriate in a particular case.

Under this option, sections 7(2) and 7(3) of Patents Act would be amended as per Option IS-2. In addition, amendments would be made to section 45 (examination) of the Patents Act to include an examination requirement to consider the 'objective technical problem'¹⁵ while reporting on inventive step. The change to section 45 would codify the EPO problem-and-solution approach into examination practice.

Legislative Change

Sections 7(2) and 7(3) of the Patents Act will be amended with any changes required for the prior art base as mentioned above for Option IS-2. Additionally, Section 45 of the Patents Act will be amended to include an additional requirement that the Commissioner must report on 'whether the invention represents a solution to an objective technical problem'.

Consequential amendments would include:

- Section 49 would be amended to provide that a patent cannot be accepted if the Commissioner is satisfied (on balance of probabilities) that it does not comply with new requirement proposed under section 45.
- Sections 98(b) (re-examination) and 59 (opposition to grant of standard patent) would be amended to provide grounds to report on re-examination and grounds to oppose the grant of the patent to comply with the proposed changes under sections 45 and 49. However, section 138 (revocation by a court) would not be amended, as the courts do not report on these sections.

Guidance

The EM in addition to what is detailed under Option IS-2 would state:

- The Commissioner of Patents will follow the problem-and-solution approach as established by the EPO technical boards of appeal to assess whether the invention represents the solution to an objective technical problem, except in exceptional circumstances.

The EPO problem-and-solution approach has three main stages:¹⁶

- determining the closest prior art
- establishing on the basis of the closest prior art, the teaching of the specification and the claimed invention, the objective technical problem to be solved; and
- considering whether or not the claimed invention, starting from the closest prior art and the objective technical problem, would have been obvious to the skilled person.

The key details would be set out in similar wordings as in EPO Guidelines for Examination and are intended to be interpreted in the same way by the Commissioner. The MPP would also be updated where necessary to provide examination guidelines in line with the EPO guidelines.

Discussion

Relative to Option IS-2, this approach retains the flexibility for the courts to determine inventive step from first principles, with all the associated advantages, but provides the Commissioner with more structured

¹⁵ See section 5.2 of the EPO Guides for Examination, available at: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_vii_5_2.htm

¹⁶ EPO guidelines for examination, part G, chapter VII, section 5. Available at: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_vii_5.htm

approach. The change to section 45 codifies the EPO problem-and-solution approach into examination practice. This approach increases legislative complexity, and may result in divergence between court and examination approach to inventive step. This could lead to uncertainty for applicants and third parties due to the inability to rely on the Commissioner's decision on inventive step.

Amendments to redraft the prior art base would have the same advantages as discussed for Option IS-2.

Option IS-4: Enshrine the EPO problem-and-solution approach in the Patents Act

Summary

Options IS-2 and IS-3 would provide an approach to the assessment of inventive step by the Commissioner that should be the same as the EPO in most cases. These options leave open a certain degree of adaptability in the assessment of inventive step, particularly for the courts. Option IS-4 would define the inventive step prescriptively in legislation to match the current EPO problem-and-solution approach.

Legislative change

Section 7(2) of Patents Act will be amended to state:

that a claimed invention is taken not to involve an inventive step if, starting from the closest prior art information and the objective technical problem, it would have been obvious to the person skilled in the relevant art, in the light of the common general knowledge and the prior art information.

The 'prior art base' definition for inventive step in Schedule 1 will be renamed 'prior art information' and redrafted in the same manner as for Options IS-2 and IS-3.

Guidance

As per Option IS-2, the EM would be based on EPO's Guidelines for Examination and will indicate that the test for inventive step is intended to be interpreted in a similar way by all decision makers. It will also indicate that the decisions and interpretations provided by the EPO on inventive step are intended to be followed in Australia. The MPP would also be updated where necessary to provide examination guidelines in line with the EPO guidelines.

Discussion

Relative to Options IS-1, IS-2 and IS-3, this option is more prescriptive, both in the legislation and the test to be applied. The option should ensure that the outcomes of an inventive step assessment in Australia will in all circumstances align with the EPO's problem-and-solution approach. It further includes the requirement for an invention to involve a technical solution to a technical problem explicitly in the Act, to put the matter beyond doubt. As such, inventive step outcomes should be the same as in the EPO.

The substantive requirements for patentability have generally been cast in broad and flexible language, with the details of interpretation left to the courts. It could be considered that a greater level of certainty in the interpretation of the law regarding inventive step is necessary for the system to be most effective at encouraging innovation and filtering out low value patents, and that this consideration may outweigh the need for adaptability in this case.

The Commissioner and the courts would have the same standard for assessing inventive step for this option.

Part 2: Technical Features

Background

The requirements for patent specifications, including the claims that define the invention, are set out in section 40 of the Patents Act (substantive requirements) and regulation 3.2A of the *Patents Regulations 1991* (matters of form). In contrast to the EPO, there is no requirement for the applicant to explicitly set out the ‘technical features’ of the claimed invention that distinguish it from the closest prior art.

The PC considered three options to improve the information available to examiners when making assessments of inventive step:¹⁷

1. Requiring applicants to specify their claims in two parts. The first part would identify the prior art relevant to the specific claim, while the second part would identify the features of the invention that add to the prior art. This would be consistent with EPO practice.
2. Requiring applicants to identify in the set of claims the technical features of the invention. Again this is consistent with EPO practice.
3. Requiring applicants to explain why the invention is non-obvious.

Ultimately the PC saw merit in requiring applicants to identify the technical features of the claimed invention. The PC considered that this would address the information asymmetry between applicants and examiners, while imposing a smaller red tape burden on applicants than the other two rejected options.

Recommendation 7.3 of the PC’s report stated:

IP Australia should reform its patent filing processes to require applicants to identify the technical features of the invention in the set of claims.

The Australian Government supported this recommendation, while noting that this recommendation aligns with recommendation 7.2, which the Government has also supported. The Government committed to implement both of these recommendations at the same time.

Policy Considerations

There are a number of policy considerations that may affect how the PC’s recommendation on technical features might be implemented, which IP Australia wants to consider, noting that it does not have a preferred option. The PC’s primary objective was to improve patent office decision making by ‘improv[ing] the information available to examiners, while minimising the costs incurred by patent offices and applicants.’¹⁸

Regulatory burden

The first consideration is the regulatory burden on the applicant in identifying the technical features. The regulatory burden on applicants can be reduced by having flexible arrangements around the provision of such information and/or aligning Australian requirements with other jurisdictions.

Audience for the information

The second consideration is the intended audience. On the one hand, the PC cast its recommendation in the context of providing *examiners* with the information necessary to make an inventive step decision. On

¹⁷ PC 2016, *Intellectual Property Arrangements*, Inquiry Report No. 78, Canberra, pp 230-232.

¹⁸ PC 2016, *Intellectual Property Arrangements*, Inquiry Report No. 78, Canberra, p 230.

the other hand, it could be argued that identifying the technical features is part of the ‘bargain’ between the public and the patentee: part of the *quid pro quo* for granting a monopoly right is adequately identifying the technical features that qualify the invention for monopoly protection.

Consequences of a failure to identify

The third consideration, which is related to the first two above, is the consequence for failing to adequately identify the technical features. Should the applicant have an opportunity to amend their application to identify the technical features? Should it result in a rejection *only* if the examiner cannot determine the technical features from other material in the specification? Or should it result in the rejection of the application, even if the examiner can identify the technical features implicit in the specification as a whole?

Interaction with inventive step test

The fourth consideration is the interaction with the various options for amending the inventive step test itself, as discussed above.

Novelty and technical features

While the PC stated that the novelty test should be based on the technical features of the invention,¹⁹ their recommendation was not to change the existing novelty test but to amend the MPP to reflect this.²⁰ However, as noted above, we propose no amendments to MPP for the novelty test as the Commissioner already disregards features that do not materially affect the way the invention works.²¹

Options

Three options are presented in relation to technical features:

- Option TF-1: Assessment by examiner through modified claim requirements
- Option TF-2: Assessment by examiner through inventive step requirements
- Option TF-3: Assessment by examiner through a separate document requirement

Option TF-1: Assessment by examiner through modified claim requirements

Summary

Under this option, applicants would be required to identify the technical features of the invention in the claims themselves. Failure to do so would result in a section 40 objection at examination (and would also be a ground for opposition, re-examination and revocation). An applicant who did not adequately identify the technical features in the first instance would be faced with the usual limitations on amendments that could be made to the claims to remedy the defect. That is, amendments that would claim or disclose matter that extends beyond the disclosure in the specification *as filed* (and certain other documents) are not allowable.²²

Legislative Change

Section 40 would be amended to include an additional requirement that a claim must identify the technical features of the claimed invention.

¹⁹ PC 2016, *Intellectual Property Arrangements*, Inquiry Report No. 78, Canberra, p 231.

²⁰ *Ibid*, 229.

²¹ Patents Manual of Practice and Procedure 2.4.8.4

²² Patents Act, s 102(1).

Consequential amendments would be made to:

- Sections 49(1)(a), 59(c), 98(a) and 138(3)(f) to include a reference to the new requirement.
- Section 102 would apply to any request to amend the claim to identify the technical features, meaning that some such amendments might not be allowable (depending on what was already included in the specification).

Guidance

The legislative requirement would be phrased in line with rule 43 EPC – ‘the claims shall define the matter for which protection is sought in terms of the technical features of the invention.’ Further details would be left to the MPP.

Discussion

This option would have some regulatory burden, in that the technical features would need to be identified in every specification. Many specifications already include this information as they would be drafted to European standards. 29% of applicants who file in Australia file in an EPC member state first,²³ and 10% of applications filed overseas by Australians are filed with the EPO²⁴

The option would also provide a strong incentive for applicants to adequately identify the technical features at the filing stage, as there may be limited scope to make an amendment later on. This would benefit both examiners and the public by providing more information about the invention.

Where an applicant fails to adequately identify the technical features, the consequence is a risk of loss of rights for the applicant, if an amendment to identify the technical features would be non-allowable under section 102. But the risk of this occurring to applications originating from other jurisdictions should be minimal since the Patent Cooperation Treaty (PCT) has a similar requirement,²⁵ and many applications that enter national phase in Australia will also enter the national phase in Europe.

Note that this option may not be appropriate if Option IS-3 above was chosen for inventive step. Under Option IS-3 the new requirement that the invention involve a solution to an objective technical problem is considered in examination, re-examination and oppositions. Option IS-3 does not propose to amend section 138, so a failure of the invention to involve a solution to an objective technical problem may not be considered during court revocation proceedings (though it may be considered implicitly as part of the amended inventive step test). Consequently, it may be unnecessary to have the requirement to identify technical features (which are supposed to support the assessment of the object technical problem) as a ground for revocation by a court.

Option TF-2: Assessment by examiner (inventive step objection if necessary)

Summary

Under this option, an applicant would only have to identify the technical features of the invention if the examiner was unable to discern the features from the existing specification. If the examiner was unable to discern the technical features, and thus unable to be satisfied that the invention was a solution to an objective technical problem, this would be raised as part of the inventive step objection (or under the new paragraph 45(1)(e) if Option IS-3 above is preferred).

²³ Five-year average (2012-2016) from [JPGOD](#) data.

²⁴ IP Australia, *Australian Intellectual Property Report 2017*, p 10. Available at: https://www.ipaustralia.gov.au/sites/g/files/net856/f/ip_report_2017.pdf

²⁵ Rule 6.3 of the Regulations under the Patent Cooperation Treaty.

Legislative Change

No legislative change would be required. The applicant would only be required to identify the technical features to the extent that an examiner could not be satisfied under the existing inventive step test (or the new separate ground under Option IS-3 above). An applicant would be under no legislative requirement to provide an identification of the technical features, but a failure to do so would likely mean that the objection would be maintained.

Guidance

The details of the requirement to identify the technical features in response to an inventive step objection would be left to the MPP.

Discussion

There would be a smaller regulatory burden for applicants compared to some of the other options, as applicants will only have to explicitly identify the technical features if they could not otherwise be discerned from the rest of the specifications. This option could reduce the information available to the public as there would not necessarily be an explicit identification of the technical features in the specification or any other document. The consequences for failing to identify the features would not be a loss of rights, as the applicant could provide further information to identify the technical features if necessary.

Option TF-3: Assessment by examiner through a separate document requirement

Summary

Under this option applications would have to include, as a separate document (not part of the specification), an identification of the technical features of the invention. The document would not be scrutinised until the examination stage. This would occur as part of the ordinary examination, and a failure to adequately identify the technical features of the invention would result in an examination objection. Importantly, this objection would be separate to the existing inventive step (and, if Option IS-3 above is adopted for inventive step, the new paragraph 45(1)(e) ground) and section 40 grounds. The examination objection could be overcome by amending the application to include an adequate identification of the technical features (unlike a section 40 objection, a failure to do this at the time of filing may not be fatal to the application).

Legislative Change

This change would involve amendment of either the Act or Regulations to introduce a requirement for an application to include a document that adequately identifies the technical features of the invention. This document would not be subject to the restrictions that apply to amendments of specifications (section 102 of the Patents Act), so it would be possible to amend these documents at any point in the life of an application.

Regulation 3.18 would be amended to require the Commissioner to report on whether the document complies with the requirement to identify the technical features of the invention. If, after any amendments, the document still did not adequately identify the technical features the Commissioner would reject the application. This would be a ground for objection at examination only: it would not be a ground for opposition, re-examination or revocation.

Guidance

The legislative requirement would be phrased in broad terms: it would simply require the applicant to 'identify the technical features of the claimed invention.' Further details as to how to comply with this would be left to the MPP.

Discussion

This option would have a substantial regulatory burden as every application would need to have a separate document identifying the technical features. Providing this information in a different format to other jurisdictions (e.g. Europe) would impose a larger burden on applicants who would have to provide the information in a different format.

A failure to adequately identify the technical features in the first instance would be dealt with as an examination objection that could be remedied by amendment, ensuring that applicants do not lose rights.

This option would have the advantage of explicitly providing the technical features information to both the public and the examiner. Article 27 of the PCT and Article 6 of the *Patent Law Treaty 2000* (PLT) may be relevant here. These articles concern the ability of the office to impose additional requirements as to the 'form or contents' of an application, but notably do not concern the requirements of substantive patent law.²⁶

²⁶ *Explanatory Notes on the PLT & Regulations of the PLT*, Art 6 (Note 6.02); PCT, art 27(5).

Part 3: Transitional arrangements

Policy Considerations

The PC encouraged the Government to implement their proposed changes to inventive step at the earliest possible opportunity, in order to improve the patent system and benefit the public by ensuring that ‘low value’ patents are less likely to be granted. There is a balance of considerations to be struck in changing a system where potentially valuable property rights are at stake, and commercial decisions may have been made long before the commencement of any legal amendments.

As explained in the EM to the Raising the Bar Act, the principles underpinning transitional arrangements that substantively impact patentability are that the changes should:

- take effect as soon as possible, to quickly bring about a better balance and operation to the intellectual property system;
- not unduly prejudice users of the system, particularly with respect to not affecting rights granted prior to implementation of the changes, or making incorrect a decision of the Commissioner made prior to the changes; and
- give applicants control and certainty over whether the old or new rules apply to their patent application.²⁷

The options below provide a range of possible transitional approaches to the proposals for reformed requirements for inventive step and technical features discussed above.

Options

In this section, three distinct options are presented in relation to transitional arrangements for the amended inventive step requirements:

- Option TA-1: Changes affect all patent applications without a first examination report
- Option TA-2: Changes affect all patents applications without an examination request
- Option TA-3: Changes affect all newly filed patent applications

Option TA-1: Changes affect all patent applications without a first examination report

Under this option, the proposed changes to inventive step and technical features would apply to all applications that have not had a first examination report issued before the date of commencement. This option allows the changes to take effect quickly, and does not impact any rights granted prior to the commencement, or rights resulting from applications whose examination has begun prior to commencement. It does not provide much opportunity for applicants to decide whether they wish to proceed under the new requirements, and places the triggering event outside the applicant’s control.

In addition:

- If Option TF-3 is chosen for technical features, for applications that are already filed, an additional notification would need to be sent by IP Australia asking the applicant to fulfil the requirements for

²⁷ Intellectual Property Laws Amendment (Raising the Bar) Bill 2011 Explanatory Memorandum, Item 55.

technical features under those options within a set time period. This would be to ensure the applications are fit for examination under the new proposed requirements.

- If Option TF-1 is chosen for technical features, this transitional approach may be unsuitable. This is because applications may not be able to be amended under section 40 to identify the technical features of the invention after they have been filed. An applicant should not lose their rights because the specification does not identify the technical features when the requirement was not law at the time they filed and they have no ability to amend the application to comply with the new law.

Option TA-2: Changes affect all patent applications without an examination request

Under Option TA-2, the proposed changes to inventive step and technical features would apply to all patents applications with an examination request date on or after the date of commencement.

This approach was followed for the Raising the Bar reforms. This option provides time for applicants to adapt to the change, and will not impact any rights granted prior to commencement, or any rights resulting from applications where examination was requested prior to commencement. By aligning the changes to substantive patentability requirements to the request for examination, applicants will have some opportunity (during the period prior to commencement by proclamation) to decide whether they wish to have their patent assessed under the new requirements.

An increase in filings and requests for examination is likely before commencement of this option which may impact the workload and future work planning for IP Australia. In addition, the changes will not come into effect as quickly as for Option TA-1.

As per Option TA-1:

- If Option TF-3 is chosen for technical features, for applications that are already filed, an additional notification would need to be sent by IP Australia asking the applicant to fulfil the requirements for technical features under those options within a set time period. This would be to ensure the applications are fit for examination under the new proposed requirements.
- If Option TF-1 is chosen for technical features, this transitional approach may be unsuitable. This is because applications may not be able to be amended under section 40 to identify the technical features of the invention after they have been filed. An applicant should not lose their rights because the specification does not identify the technical features when the requirement was not law at the time they filed and they have no ability to amend the application to comply with the new law.

This is considered to be less of a risk than for Option TA-1, as applicants will have control of the progress of their application and be able to request examination prior to commencement of the reforms.

Option TA-3: Changes affect all newly filed patent applications

Under Option TA-3, the proposed changes to inventive step and technical features will apply to patent applications with filing dates on or after the date of commencement.

This option aligns the changes to substantive patentability requirements to the filing date which means only new filings from commencement will be examined under the new requirements.

Although this option provides the most time for applicants to fully adapt to the changes, it also allows for the continued grant of patents for a substantial amount of time under the current standards, which would appear contrary to the PC's intention.

Questions for consultation

- P1 Which options under Parts 1, 2 and 3 do you prefer and why?
- P2 What are other possible benefits and disadvantages of options under each part, including any unintended consequences?
- P3 Are there any other better options that have not been considered?
- P4 Should Option IS-3 as proposed under Part 1 (inventive step) also include amendments to grounds to re-examine or to oppose grant of standard patent? Are there any other implications not considered?
- P5 Does your preferred option under Part 2 (technical features) depend on the option that is chosen for Part 1 (inventive step)? If so, please explain.
- P6 As noted above, for the purposes of novelty, the Commissioner already disregards features that do not materially affect the way the invention works.²⁸ Do you foresee any problems with maintaining this approach?

²⁸ Patents Manual of Practice and Procedure 2.4.8.4

Attachment A – Assessing inventive step

Overview

Fundamentally, the inventive step requirement in all major jurisdictions considers whether a claimed invention is obvious to a hypothetical skilled person and asks what that person would do given assumed skills and knowledge relevant to the particular circumstances of the case. The assumed skill and knowledge incorporates what is the common general knowledge in the art, and the prior art base. However, approaches do vary between jurisdictions and the current Australian and EPO approaches are detailed below.

Australian approach to assessing inventive step

Section 7(2) of the *Patents Act 1990* (Patents Act) provides the statutory basis to assess inventive step during patent examination, re-examination, opposition and court proceedings. An excerpt of the section states:

...an invention is 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).

Information for the purposes of inventive step according to section 7(3) of the Patents Act is:

- a. any single piece of prior art information; or
- b. a combination of any two or more pieces of prior art information that the skilled person could, before the priority date of the relevant claim, be reasonably expected to have combined

There are two elements to the assessment of the inventive step in Australia: determination of the relevant prior art; and application of the test of whether the skilled person would find the invention obvious in the light of that prior art.

The prior art information is construed by the skilled person in light of the common general knowledge as it existed at the priority date of the claims being examined.²⁹

The test for inventive step is fundamentally whether the skilled person 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.³⁰ The High Court endorsed the approach to considering this question as:

*"would the notional research group, at the relevant date, in all the circumstances, which include a knowledge of the relevant prior art... be **directly led as a matter of course** to try [the claimed invention] in the expectation that it **might well** produce a useful [result]"* (emphasis in original).³¹

²⁹ The disclosure of a citation (being the information set out in s 7(3)(a) or (b)) may be effectively extended by having regard to common general knowledge in the art as established in the period between the publication date of the citation and the priority date of the claim under consideration.

³⁰ *Wellcome Foundation (1981)* 148 CLR 262 at 286

³¹ *Aktiebolaget Hassle v Alphapharm Pty Ltd* [2002] HCA 59 at [53];

Problem and solution approach to inventive step

An approach generally used by the Australian courts and by the Commissioner of Patents to consider these factors in examination, and to help avoid ex post facto analysis is the problem-solution approach endorsed by the Australian courts³² (which has differences to the EPO problem-and-solution approach, see below).

The Australian 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 that the invention solves. The problem-solution approach also ensures that the decision maker's consideration of whether a claim lacks an inventive step:

- a. is valid and sustainable; and
- b. identifies all the issues relevant to establishing lack of inventive step.

EPO approach to assessing inventive step

Article 56 of the European Patent Convention (EPC) defines that:

An invention shall be considered as involving an inventive step if, having regard to the state of the art, it is not obvious to a person skilled in the state of the art.

The state of the art is defined under Article 54(2) of the EPC and comprises:

...everything made available to the public by means of a written or oral description, by use, or in any other way, before the filing or priority date of the European patent application.

The problem-and-solution approach is used almost universally at the EPO as a tool to determine inventive step. Over the years, there has been extensive case law from the Technical Boards of Appeal of the EPO concerning the correct way to use this approach. This approach involves the following main steps:

1. determine the closest prior art,
2. establish an 'objective technical problem' (in the light of that prior art) to be solved, and
3. consider whether the claimed invention, starting from the closest prior art and the problem to be solved, would have been obvious to the skilled person.

The approach is seen as a way to provide a level of objectivity in the assessment of inventive step, and avoid ex post facto analysis.³³ While the problem-and-solution approach aims to provide a predictable outcome of patent prosecution, this approach may be unsuitable for some inventions, including where the invention lies in the identification of the problem, or where there is no single piece of closest prior art.³⁴

1. What is the Closest Prior Art?

The decisions of the EPO provide that the 'closest prior art' for assessing inventive step should normally be a prior art document disclosing subject-matter conceived for the same purpose or aiming at the same objective as the claimed invention and having the most relevant technical features in common, i.e. requiring the minimum of structural modifications to achieve the claimed invention.

³² HPM Industries Pty Ltd v Gerard Industries Ltd 98 CLR 424

³³ EPO guidelines for examination, part G, chapter VII.

³⁴ [T 465/92 \(OJ 1996,32\)](#) where the the board did not take the problem and solution approach when assessing inventive step, and said this was merely one possible approach, with advantages and drawbacks.

Where more than one document is cited as prior art, the closest is that which provides the skilled person with the most promising springboard to the invention, i.e. the one starting from which the subject-matter of the invention is rendered most obvious.³⁵

2. What is the technical problem to be solved?

In the EPO guidelines for examination, the technical problem (often referred to as the ‘objective technical problem’) is described as:

... the aim and task of modifying or adapting the closest prior art to provide the technical effects that the invention provides over the closest prior art.

A technical problem may be regarded as being solved only if it is credible that substantially all claimed embodiments exhibit the technical effects upon which the invention is based.

According to the EPO guidelines, formulation of the technical problem to be solved by the invention requires an objective determination of the technical and structural features that distinguish the invention from the closest prior art. Features that cannot be seen to make any contribution, either independently or in combination with other features, to the solution of a technical problem, are not relevant for assessing inventive step. This inherently excludes non-technical features from consideration since (according to this approach) non-technical features cannot solve a technical problem.

The EPO guidelines further note that the expression ‘technical problem’ should be interpreted broadly; it does not necessarily imply that the technical solution is an improvement to the prior art. Thus the problem could be simply to seek an alternative to a known device or process that provides the same or similar effects or is more cost-effective.

3. Is the claimed invention obvious?

Lastly, to determine whether the claimed invention is obvious the EPO approach requires the examiner to assess whether there is any teaching in the prior art as a whole that *would* (not *could*) have prompted the skilled person, faced with the objective technical problem, to modify or adapt the closest prior art and arrive at something falling within the claim, thus achieving what the invention achieves.

The answer to the question of what a skilled person would have done depends in large measure on the technical result they had set out to achieve. In other words, the notional ‘person skilled in the art’ is assumed to act not out of idle curiosity but rather with a specific technical purpose in mind.³⁶ In determining what the skilled person would have done, the examiner is allowed to take into account the teaching of other items of prior art, as well as the knowledge, skill and experience of the skilled person in the art.

Differences between EPO and Australian problem and solution approach

Although both the EPO and Australia use a problem and solution approach, the approaches differ in some details of how they assess inventive step, which can lead to different outcomes between the two jurisdictions.

At the EPO, the first step is the identification of the closest prior art. The problem is then considered to reside in the technical difference between the closest prior art and the claims in question. In Australia, the problem is determined from a reading of the specification and on the basis of the invention so far as

³⁵ [T 656/90](#), [T 824/0](#), [T 1755/07](#), [T 698/10](#).

³⁶ Decision of the Technical Boards of Appeal **T 939/92** (OJ 1996, 309)

claimed in any claim (understood by a skilled person, armed with the common general knowledge).³⁷ The presence or absence of an inventive step between the prior art and the claimed invention is only considered once the problem has been established and the relevant prior art identified.

Also, the problem in the EPO must be a technical problem, while the non-technical features that provide a point of difference between the closest prior art and the claim are disregarded. In Australia, the claim must be construed as a whole when assessing whether it involves an inventive step.³⁸

³⁷ *AstraZeneca AB v Apotex Pty Ltd* [2014] FCAFC 99

³⁸ *MPP 2.5.1.6 Assessing Inventive Step in Examination*

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