

Patent applicants should outline their invention's "inventive step" for a standard patent or "innovative step" for an innovation in the application:

1. The application for a standard and innovation patent is governed by the rules set out in the *Patents Act 1990* (Cth), the *Patent Regulations 1991* (Cth) and the Australian Patent Office Manual of Practice and Procedure (available at [http://www.ipaustralia.gov.au/pdfs/patentsmanual/WebHelp/Patent\\_Examiners\\_Manual.htm](http://www.ipaustralia.gov.au/pdfs/patentsmanual/WebHelp/Patent_Examiners_Manual.htm)).
2. An application for a standard or innovation patent requires the applicant to lodge an application (Patents Act, s 29; Patent Regulations, 3.1).
3. Before a complete specification is lodged applicants generally lodge a provisional application to establish the priority date (Patents Act, s 30). Otherwise the complete specification application establishes the priority date (Patents Act, s 30). The benefit of the provisional application is that this gives the applicant 12 months to determine whether to lodge a complete specification with its attendant high costs while still maintaining the priority date.
4. The provisional application "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" (Patents Act, s 40(1)).
5. The 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" (Patents Act, s 40(2)).
6. The application for a standard and innovation patent does not include any requirement for the applicant to identify or give any information about the "inventive step" for a standard patent or "innovative step" for an innovation patent. The "innovative step" is not considered further in this discussion, although similar arguments might be made.
7. The threshold for assessing whether there is an "inventive step" is for the examiner (Patents Act, s 45(1)(b)), and the decision maker on opposition (Patents Act, s 59(b)), re-examination (Patents Act, s 98(1)(b)) and revocation (Patents Act, s 138(3)(b)).
8. So, for example, during examination of an application for a standard patent an examiner must consider whether a claim contains an "inventive step" in relation to the prior art base (Patents Act s, 18(1)(b)(ii); Australian Patent Office Manual of Practice and Procedure, 2.5). It is for

the examiner, based on the complete specification and any valid prior art information, to determine whether to raise an objection: “For an inventive step objection to apply, it must be established that the prior art information (if any) would be relied upon by a person seeking a solution to the problem, and that any consideration of the common general knowledge with that prior art information would be obvious to that person” (Australian Patent Office Manual of Practice and Procedure, 2.5.1.1).

9. Australia’s international commitments do not specifically address the process for assessing an “inventive step”.
10. The TRIPS agreement only requires the applicant to sufficiently disclose the invention so that it can be carried out by a skilled person and may require disclosure of the best method of carrying out the invention (TRIPS, Art 29(1)). The TRIPS agreement imposes standards about the quality of information that an applicant must provide and not about the quantity of required information or how that information is to be gathered (see Justin Malbon, Charles Lawson and Mark Davison, *The WTO Agreement on Trade-Related Aspects of Intellectual Property Rights: A Commentary* (Edward Elgar, 2014) pp 463-472).
11. The TRIPS agreement requires “inventive step” to be assessed as a threshold and provides no further detail about how this is to be assessed. This reflects the evolution of this standard that together with “non-obviousness” encapsulates the different practices of assessing patent thresholds and the search for a threshold that distinguishes protectable inventions from workshop developments and other advances that are unworthy of a patent grant (see Justin Malbon, Charles Lawson and Mark Davison, *The WTO Agreement on Trade-Related Aspects of Intellectual Property Rights: A Commentary* (Edward Elgar, 2014) pp 421-422).
12. Interestingly, Australia has not clearly developed its patent scheme to distinguish completely between the “newness”, “novelty” and “inventive step” elements in assessing the patent thresholds (see Charles Lawson, “The Evolution of ‘Inventive Step’-like Elements in Australian Patent Laws” (2007) 18(3) *Australian Intellectual Property Journal*, pp 130-148). This means that some of the “inventive step” information may also be relevant in assessing other thresholds of “invention” and “novelty”.
13. The *Australia-United States Free Trade Agreement* does not address the quality or quantity of information that must be disclosed to assess “inventive step” (or “non-obviousness”). The agreement does, however, require each party to “endeavour to reduce differences in law and practice between their respective systems” (AUSFTA, Art 17.9.14). The United States does not presently ask applicants to disclose how their invention satisfies the “non-obviousness” threshold.

14. The application should require the applicant to identify the “inventive step” (and perhaps also other key threshold standards such as suitable subject matter, novelty, industrial application, and secret uses) so that the examiner (or other decision makers) has a basis for determining the thresholds. The applicants needs to set out what is the inventive step (so to explain why their intention is non-obvious) because non-obviousness is about more than just being an advance on the prior art – the explanation needs to identify the spark of invention. How this might be worded in the patent legislation and practice manuals would need careful assessment. The practice manual currently uses the problem/solution approach (although this may not always work) and this might help in framing the inventive step – “For an inventive step objection to apply, it must be established that the prior art information (if any) would be relied upon by a person seeking a solution to the problem, and that any consideration of the common general knowledge with that prior art information would be obvious to that person” (Australian Patent Office Manual of Practice and Procedure, 2.5.1.1). Presumably this is an issue that the applicants have already considered in deciding to lodge an application so it is just formalising a presently informal part of the application processes.
15. Recall that the patent system developed before the administrative law reforms introduced in Australia in the 1970s and 1980s. This included statutory schemes such as the *Administrative Appeals Tribunal Act 1975* (Cth) and the *Administrative Decisions (Judicial Review) Act 1977* (Cth) requiring, in part, that decision makers provide reasons for their decisions. The patent application process reflects this pre-administrative law reform age.
16. The administrative law reforms introduced in Australia in the 1970s, 1980, and 1990s focus on improved decision-making and facilitate decision makers properly addressing the elements of the statutory schemes. A central element in making better decisions is to inform the decision maker about the elements on the decision at hand, including information about what the applicant thinks about the threshold, such as the “inventive step”. This is generally achieved by asking the applicant for the information that the decision maker needs to assess in making a decision. So, for example, a war veteran is asked about their war service, an injured worker is asked about their injury, and so on. A patent applicant is not asked about the “inventive step”.
17. By failing to ask a patent applicant to disclose their understanding about what the threshold is for “inventive step” for their invention, then it is the examiner (or other decision makers) that has to construct the threshold from materials available to them. This is problematic as the applicant is likely to have the best information about their invention, and the error is likely to be that the examiner grants a patent when they may not have if they had the relevant information available to them.

18. The consequence of requiring the examiner (or other decision makers) to establish the “inventive step” from the materials available to them is that they avoid challenging an applicant by assuming the threshold has been met. In these circumstances, the easiest option for the examiner (or other decision makers) is to avoid the challenge and just assume that the prior art information would not be relied upon by a person seeking a solution to the problem, and that any consideration of the common general knowledge with that prior art information would not be obvious to that person. By having the applicant disclose the “inventive step” the examiner is essentially forced to make an assessment and the disclosure creates a focus for making that assessment (even if the examiner later decides the “inventive step” is something different).
19. More importantly, however, is that getting the applicant to disclose the “inventive step” addresses the problem of what an experienced and knowledgeable person in the area of technology to which the invention relates thought at the time of the application (priority date). While this does not resolve exactly what a non-inventive person in those circumstances thought it does enlighten what key and relevant experts did contemplate at the time.
20. Another way of thinking about this problem is type 1 and type 2 errors. If a type 1 error is considered to be a “false positive” in that the examiner finds that there is an “inventive step” when there is no “inventive step”, and a type 2 error is a “false negative” in that the examiner finds there is no “inventive step” when there is an “inventive step”. Then in this framing:
  - (a) Type 2 error – Where the examiner decides there is no “inventive step” when there is one (a “false negative”). The applicant will challenge the examiner’s decision by asserting what is the “inventive step” and the assessment can be corrected (if it was incorrect).
  - (b) Type 1 error – Where the examiner finds there is an “inventive step” when there is not one (a “false positive”). The applicant is unlikely to challenge the examiner’s decision as they get the patent grant (assuming all other elements and requirements are satisfied).
21. Perhaps it is also worth considering a broader public interest in achieving better decisions. A patent grant is a restriction on competition and the examiner (and other decision makers) is making this decision for the broader public. This means that the examiner (and others) should be provided with all reasonable information to make the decision. The correct and preferable decision is more likely to be achieved where an applicant is required to disclose their understanding about the “inventive step”.

22. The applicant can always resile from their statement about an “inventive step” in an application (such as when a competitor challenges their patent in the Federal Court). They would, of course, then probably need to justify that position.
23. The costs of asking applicants to identify the “inventive step” (and perhaps also other key threshold standards) will be minimal, as the applicant will already have made these assessments in deciding to lodge a provisional and complete specification.
24. The most significant benefit from asking an applicant to disclose the “inventive step” is that this brings a focus to the current very low level of invention required to gain a patent. At present, a “scintilla of invention” is enough to satisfy an “inventive step”. If the desire is to raise this threshold so that patents are only available for significant, substantial, serious or sizable advances on the prior art (and prior art information), then requiring applicants to commit to disclosing how their inventions are inventive can start a policy discussion (backed by evidence from applicants’ disclosures) about how to set a higher threshold and how to formulate that threshold. The collected evidence of what applicants say is their inventive contribution will allow IP Australia to better gauge how to set a threshold for “inventive step” at a higher level than “scintilla of invention”. This will also restore the ideal that patents should not be available for mere workshop developments.