

Inventorship versus ownership of patent applications

Expectations of inventorship status require careful handling in organisations where certain cultural habits and beliefs may not be aligned with legislative requirements.

Introduction

The custom of some organisations to include the head of the department as a co-author on a scientific paper, or to add authors as a reward for their efforts, is inappropriate in the context of determining inventorship. Declaring a non-inventor as an inventor on a patent application is a false declaration and can have serious repercussions if ever exposed.¹ Guidelines for determining inventorship, the consequences of getting it wrong and the concept of ownership versus inventorship are discussed here.

Inventorship and the inventor

Perhaps surprisingly, the terms *inventor* and *inventing* are not explicitly defined in the *Australian Patents Act 1990* (Cwlth). The terms are, therefore, open to interpretation by the courts.²

In *Atlantis Corporation Pty Ltd v Schindler* (1997) 39 IPR 29 the word *inventor* was held to have its ordinary English meaning. Accordingly, simply recognising a need that must be filled or appreciating that something may have a new use is not sufficient to confer inventorship status.

The current Australian authority, backed by a raft of case law relating to the determination of inventorship,

states that 'the common theme ... is that a person has entitlement to an invention if that person's contribution, either solely or jointly with others, had a material effect on the final concept of the invention. A secondary issue is whether the person's contribution involved a key inventive step'.³ In the case of co-inventors, entitlement is to the invention 'as a whole' (rather than its component parts) and the relative inventiveness of the contributions has been held to be of secondary importance.

In US law, an inventor is one who, alone or with others, first invents a new and useful process, machine, composition of matter (or other patentable subject matter). One of the most important considerations in determining inventorship is initial conception of the invention,⁴ which is defined as: '... the formation in the mind of the inventor of the definite and permanent idea of a complete and operative invention as it is thereafter to be applied in practice'.⁵ Therefore, conception requires two steps: recognising the ultimate result to be accomplished and developing a means to achieve the desired result. Conception is incomplete where someone claims to have conceived of the desired result but fails to adequately describe (or contribute) to the means to accomplish that result.

Guidelines for determining inventorship

Dispassionate consideration must be given to whether a person has made an inventive contribution to an invention. Failure to correctly

identify inventors on a patent application can be fatal to a patent subsequently issued on the basis of the application.

When a patent application is filed in the US, each person named as an inventor is required to submit to the United States Patent and Trademark Office (PTO) a signed oath to the effect that they are the 'true' inventor. A false declaration can jeopardise the future validity or enforceability of the US patent.⁶

Posing specific questions, requiring specific responses from each potential inventor, can be helpful in clarifying whether a person is entitled to be nominated as an inventor. The following non-exhaustive list of questions⁷ can be useful in determining inventorship and, typically, will be a starting point for further discussion with a patent attorney.

Did the person:

- contribute specific ideas that resulted in the development of the invention?
- contribute more than labour to one or more of the inventive or technically significant features of the invention?
- make practical and/or concrete suggestions that contributed to the invention?
- provide a specific design or experimental improvement that made the invention operable?
- conceive an inventive step or part of the invention that you can identify?
- have some role in the final conception of an invention as it is (will be) patented?

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If the answer to one or more of the previous questions is 'yes', the individual may be an inventor.

If the answer to all of the above questions is 'no', the individual is unlikely to be an inventor even if they answer 'yes' to the following:

- Did your ideas serve as a general goal or objective of the research?
- Were you retained or employed to reduce the concept to practice?
- Did you contribute ideas while the invention was being developed, but those ideas don't contribute to the invention in its final form or as disclosed in the patent application?

Inventorship disputes

Determining inventorship is a complex issue and the decision about whether a person is an inventor belongs ultimately to the courts. If there is ambiguity or disagreement, advice should be sought from a professional, i.e. a patent attorney or a legal practitioner with some experience in the area.

In the vast majority of Australian cases, the identity of the inventor is an issue resolved primarily by reference to the common law under which rights in an invention generally reside with the inventor's employer. The issue of inventorship is not generally considered by patent offices unless a dispute arises, with the aggrieved party notifying the patent office claiming either that they had a hand in the invention or that the invention was stolen from them. These disputes are dealt with on the facts by the Commissioner. Furthermore, incorrect identification of an inventor can provide a ground for opposition or revocation of an Australian patent. It is also worth noting that anyone can initiate an application for a patent, but it does not follow that the person applying is granted the patent rights as it may turn out during prosecution that the applicant is not the true inventor.

In US law, a putative inventor left unnamed on a patent may elect either administrative or judicial means of correcting inventorship. However, courts have been reluctant to invalidate patents for incorrect

inventorship because it is a highly technical defence that destroys an otherwise valid patent. Incorrect inventorship of a patent application or a granted patent can be corrected, but only where the error was made in good faith. Another means for a putative inventor to assert inventorship is to begin an interference proceeding.⁸ To do so, they must file a patent application for the disputed invention with the correct inventorship and request an interference proceeding⁹ with regard to the original patent. The proceeding resolves conflicting claims on the same invention and is regarded as one of the most expensive and protracted dispute resolution mechanisms in US law.

'First-to-file' and 'first-to-invent'

In US law, a patent can only be granted to an applicant who is *inter alia* 'the original and first inventor'. Thus, one who does not themselves invent the subject matter to be patented is precluded from obtaining a patent. Accordingly, the US has adopted the 'first-to-invent' patent system, which is thought to place a premium on inventing without wasting resources on frequent races to the patent office. The rest of the world, including Australia, has adopted the 'first-to-file' system, which awards a patent to the first person to file an application for an invention. This system is thought to encourage inventors to file quickly to beat subsequent inventors to the office. Society benefits from this system because an invention that is quickly patented will have its protection expire sooner, therefore allowing the invention into the public domain sooner.

In order to apply the 'first-to-invent' rule, the date at which the invention is first reduced to practice is very important and so in the USA, and outside the USA when applicants may wish to subsequently file for a US patent, special importance is placed on the diligent maintenance of laboratory notebooks. The laws in Australia are different, so there is no special requirement to maintain laboratory

notebooks in the way that there is in the USA. However, in circumstances where there is a dispute relating to inventorship in Australia, notebooks will be highly relevant as evidence of inventorship.

Ownership

In Australia, a patent may only be granted to a person who is the inventor, a 'person' (e.g. an individual or a company) entitled to have the patent assigned to them/it, a person who derives title to the invention from the inventor or assignee or, in cases where the person is deceased, their legal representative. Most countries work on principles similar to the old British law concept of 'master and servant', that is, if you make an invention in company time using company materials in a field of relevance to the company's business, and it is not unreasonable that you could contribute to an innovative idea as part of your work, the invention belongs to the company as of right. Paid researchers fall squarely into this category. In nearly all cases, inventors are legally obliged to assign the inventions to their employer and, further, to assist them in patenting these new inventions (e.g. by signing any necessary forms and doing any further necessary work). Contractually, the right to assist may extend beyond the employment period. However, if the cleaner invents an improved pump valve for an automotive company, more than likely the rights of the invention will reside with him or her.

The USA and Germany adopt a system of 'apportioning of rights'. In the absence of an express agreement, the employee will be granted the patent and the employer will be given a 'shop right' licence to exploit the patent. The employee/inventor retains ownership of the patent but the employer has a right to use the invention without paying the employee. In Germany, rights to a patent are shared and there is an elaborate procedure for working out how much remuneration an inventor ought to receive.

In Japanese patent law, the invention passes to the employer but the employee has a right to receive 'reasonable remuneration' for the invention. The amount of the remuneration is decided by reference to the profits that the employer will make from the invention and the relative contributions made by the employer and the employee to the invention. These provisions were recently used in spectacular fashion. In 2004, the Tokyo High Court set reasonable remuneration for the blue light-emitting diode at US\$190 million! The case was settled out of court with Nichia Corporation agreeing to pay the inventor US\$8 million.

Conclusion

Inventorship on patents and authorship on a technical manuscript are issues that should be divorced if one is to obtain valid and enforceable rights for a patent. The true inventors and only the true inventors should be named on a patent application to avoid lengthy and costly untangling at a later stage. A few simple questions posed

prior to filing the patent application, coupled with sensitive management of the expectations of those involved in the development of the invention, can be critical.

References

- 1 See ss138(3)(d)(e) of the *Patents Act 1990* (Cwlth). *Avery's Patent* (1887) 4 RPC 152 at 322.
- 2 s15, s17, s32 and s36 of the *Patents Act* contains a reference to the actual inventor but no definition of what is involved, i.e. 'a patent for an invention may only be granted to a person who: (a) is the inventor'. To date, there has been surprisingly little judicial consideration of the concept of inventorship but see the discussions in *Davies Shephard Pty Ltd v. Stack* (2001) 51 IPR 513 and *Advanced Building Systems Pty Ltd v. Ramset Fasteners (Aust) Pty Ltd* (1993) 26 IPR 171 at 191-192.
- 3 *Row Weeder Pty Ltd v. Nielsen* (1997) 39 IPR 400 (approved by the Administrative Appeals Tribunal in *Upham v. Commissioner of Patents and Another* (1998) AATA 852).
- 4 *Fina Oil & Chem. Co. v. Ewen* (1997) 123 F.3d 1466, 43 USPQ 2d 1935.
- 5 *Hybritech, Inc v. Monoclonal Antibodies, Inc.*, (Fed. Cir. 1986), 802 F.2d 1367.
- 6 Despite the patentability of an invention, the grant of a patent may be denied if the applicant pursues a course of 'inequitable conduct' before the USPTO, which will render all of the claims of a patent unenforceable. Simple errors in determining the identity of all of the inventors can be readily corrected and such errors do not constitute inequitable conduct. However, a wilful decision not to include a true inventor on the application (or to add a false inventor) does constitute inequitable conduct, and cannot be corrected.
- 7 These questions are provided simply as guiding principles and do not constitute legal advice. Each case needs to be assessed individually.
- 8 under 35 U.S.C. §135.
- 9 An interference proceeding in the PTO occurs when more than one application seeks to cover substantially the same invention. The PTO will resolve the interference by allowing the patent with the correct inventorship and rejecting the others.

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