

Can your digitally-enabled process be patented? Maintaining a disruptive advantage

Patents
Trade Marks
Designs
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Innovative processes and new digital technologies can often provide a crucial competitive edge - but that advantage exists only for as long as others do not imitate and exploit the innovation. Intellectual Property rights, such as patents, can provide legal protection for your advantage and discourage others from imitating it.

In modern business however, IP protection is about far more than simply preventing others from copying an innovation. No company can exploit all of its ideas in every situation – and sometimes someone else’s ideas can fill in the gaps on a corporate project. Thus IP rights can be licensed out to generate new revenue where the owner cannot invest and IP rights can be licensed in where needed. Also, IP rights form an asset which can be sold, reported or used to secure finance arrangements. In the last resort, companies operating in struggling sectors in Australia today, have been rescued from collapse by attracting overseas buyers for their IP portfolios.

What digital innovations can be patented in Australia?

If your digital innovation takes the form of a new piece of hardware – a new component or tool that creates an economic or productivity advantage, then in most cases it will constitute “patentable subject matter”. However, in recent years there has been considerable controversy in Australia and around the world, concerning whether the law should allow business methods and processes that are implemented using digital technology to be patented. If your new idea takes the form of a business process or method that is implemented in this way, it is possible it may be protected. Below, we explore the recent court decisions that lay out the criteria your invention must meet to be patentable subject matter.

An ‘artificial state of affairs’

In 2006 the Full Federal Court of Australia set out basic requirements for a method to be patentable. A patentable method must have some “*industrial or commercial or trading character*”, and there must be some “*useful product*”, physical phenomenon or effect resulting from the working of the method. The Full Federal Court reaffirmed the view of previous cases that “*‘intellectual information’, such as a mathematical algorithm, mere working directions and a scheme without effect are not patentable*”.

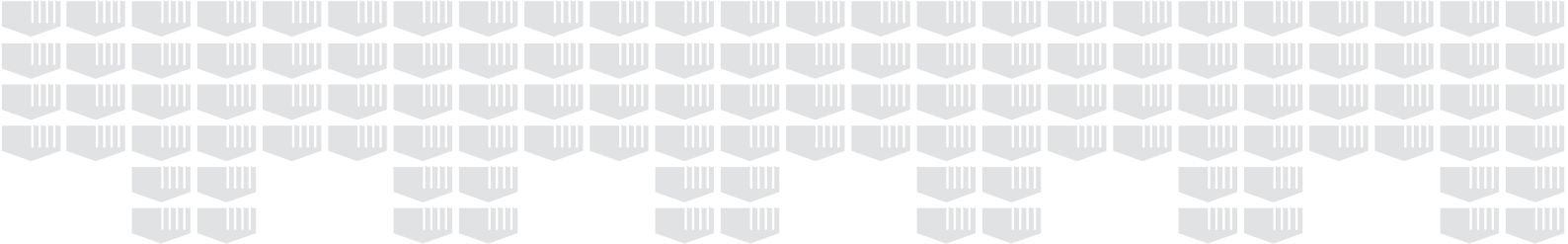
With regard to methods implemented in computers or other physical devices, the Full Federal Court considered that a method may still be patentable, in the absence of a physically observable end result in the sense of a tangible product, if “*an artificial state of affairs*”, in the sense of “*a concrete, tangible, physical, or observable effect*”, is produced by the application and operation of the method in the physical device.

Two recent cases have highlighted the essential difference between a patentable digitally implemented business method and one which is not.

Not patentable - The modern equivalent of writing it down on a piece of paper

A recent case regarding whether an invention by Research Affiliates LLC should be patentable has been controversial and required a decision on appeal to the Full Federal Court. The invention in question was a computer implemented method for generating an index for use in securities trading. The method included accessing data, processing data to identify a selection to include in an index, accessing a weighting function configured to weight the selections, and applying the weighting function to generate the index.

In the original case, the primary judge said that “*a mere scheme, abstract idea, or mere information, is not, of itself, patentable. Some physical effect is required.*” Emmett J considered that the only



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- Trade Marks
- Designs
- IP Strategy

physical result generated by Research Associates' method was a computer file containing an index, and that the index was simply information. Emmett J added that there was nothing in the claim or the specification to describe how the computer implemented steps, such as accessing data and applying the weighting function, were performed. In view of this, Emmett J considered there to be no "economically valuable artificially created state of affairs" resulting from the use of the computer in the claimed invention.

Emmett J additionally noted that "the steps could readily have been carried out manually" and that implementation of the method by means of a computer was "no more than the modern equivalent of writing down the index on pieces of paper".

The Full Federal court agreed and said: "It is apparent from the description in the specification that the computer is simply the means whereby the analyst accesses data to generate an index. The work in generating the index and weighting is described in terms of the work of the analyst rather than as some technical generation by the computer. Indeed, while the specification states that the invention may be used for investment management or investment portfolio benchmarking, the exemplary embodiment makes it clear that it may be, but is not necessarily, implemented on a computer."

Patentable - The computer is central and the method produces a physical effect

Another case in 2013 concerned an invention owned by RPL Central Pty Ltd. It was a method of gathering evidence for assessing an individual's competency relative to a recognised standard. The method included retrieving criteria via the internet, processing the criteria to automatically generate corresponding questions, presenting the questions via the internet to an individual, and receiving a series of responses to the questions from the individual via their computer.

The judge in this case ruled that the invention was patentable because "the generation of questions for and presentation of questions to the user creates an artificial state of affairs in their computer", in that there is "a retrieval and transformation of data into questions, and a corresponding change in state or information in a part of a machine". Middleton J considered each of these events to be "a physical phenomenon in which the effect of the invention may be observed".

Middleton J considered the decision in *RPL Central* to be distinguishable from the decision in *Research Associates*, because the specification and claims in issue in *RPL Central* provide significant information about how the invention is to be implemented by means of a computer and the computer is integral to the claimed invention, such that a specific effect is generated by the computer. The Full Federal Court, in their decision on *Research Associates* appeared to agree. They said "Justice Middleton summarised the invention in *RPL Central* at [139] as one that enabled the retrieval of relevant data from a remotely located server via the internet and the generation of questions for, and presentation of questions to, the user based on this data. The effect of the process was experienced by the individual user on a computer. The user's responses were transferred to the assessment server. Importantly, 'the involvement of the computer in the invention is described in these claims in such a manner that it is inextricably linked with the invention itself'.

Summary

By giving clear recognition and support to the decision of Judge Middleton in *RPL Central*, the Full Federal Court has maintained the law that where a computer is "inextricably linked with the invention itself", then claims to business methods and software are patentable in Australia. We continue to have some success in taking applications for computer implemented business methods to acceptance based on this distinction. We would therefore continue to recommend seeking advice on patent protection. However, not every application can be distinguished in this manner, and so the content of each application will need to be considered carefully.

For more information about patenting digital innovations, contact our Principal and Head of Physics, Electronics and Telecommunications Ernest Graf on egralf@fak.com.au.