

Business method patents: one click and they're here to stay

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1 Introduction

The author of section 6 of the Statute of Monopolies did not have the internet in mind. In drafting that provision in 1623, the author cannot have imagined that it would be central to the concept of patentability in Australia in the 21st century.

Section 6 of the Statute of Monopolies says:

"Provided also (and be it declared and enacted) that any declaration before-mentioned shall not extend to any Letters Patent and grants of privilege for the term of 14 years or under, hereafter to be made, of the sole working or making of any manner of new manufacture within this realm, to the true and first inventor and inventors of such manufactures which others at the time of making such Letters Patent and grant shall not use, so as also they be not contrary to the Law or mischievous to the State, by raising prices of commodities at home, or hurt of trade, or generally inconvenient."

Section 18(1) of the Patents Act 1990 (Cth) provides that, among other things, it is a requirement of eligibility for the grant of a patent that the patent claims, "a manner of manufacture within the meaning of section 6 of the Statute of Monopolies"¹.

Given the increasing importance of patents for securing monopolies in business methodologies and systems, it is timely to enquire whether this antique term is apt to ensure that Australia is in line with other patent systems and markets. This article will examine current thinking on business method patents in Europe and the United States and whether Australia is in step with recent developments and trends.

2 What business methods are patentable?

The Australian Advisory Council on Intellectual Property (ACIP) is currently undertaking a review of Australia's position in relation to the patentability of business systems (discussed in more detail below) and has adopted the following working definition:

"A 'business method' is:

- (a) scheme plan or method of:
 - (1) administering, managing or otherwise operating an enterprise or organisation, including a technique used in doing or conducting business; or
 - (2) producing, analysing or processing financial or management data;in a field of economic endeavour; and
- (b) any computer assisted implementation of a systematic means described in (a) above."²

Whether business methods should be patentable and whether the current law allows them, has been a controversial topic in a number of jurisdictions. Critics have argued that business method patents are unworkable and prone to stifle ordinary commerce.

2.1 United States

Before 1998, there was a widely held view in the United States that a method of doing business was not patentable. This belief was dispelled by the decision in *State Street Bank & Trust Co v Signature Financial Group Inc*³ (*State Street*).

That case concerned a patent for a "data processing system for implementing an investment structure which was developed for use in

Signature's business as an administrator and accounting agent of mutual funds. In essence, the system, identified by the proprietary name Hub and Spoke®, facilitates a structure whereby mutual funds (Spokes) pool their assets in an investment portfolio (Hub) organized as a partnership (*System*)"⁴.

The claims of the patent referred to 7 integers comprising the System:

- (a) a computer;
- (b) storage means (disk);
- (c) means for initialising the storage medium; and
- (d) four arithmetic logic circuits for processing various categories of data relating to the performance of the investment portfolio on a daily basis.

In most patent jurisdictions, including the United States, Europe and Australia, the Courts have found that bare mathematical algorithms are not patentable on the basis that they are merely abstract ideas. Software often incorporates a collection of algorithms. In *State Street*, however, the United States Court of Appeals held that the System produced a "useful, concrete and tangible" result and was therefore potentially the subject of a valid patent. The result in that instance was "a final share price momentarily fixed for recording and reporting purposes"⁵. In the United States, there is no equivalent threshold requirement for patentability to the concept of "manner of manufacture" in the Australian Patents Act, but the Court of Appeals approach in *State Street* is not dissimilar to that taken in Europe. In addition, a "business method" or software patent must comply with the ordinary principles of patents such as novelty, obviousness and utility. The Court of Appeals remanded the case on these issues.

The United States Patent Office has been criticised for issuing too many patents in the business methods area

which are unlikely to be upheld in court. One example which has attracted attention is the patent issued to British Telecom (BT), which BT believed covered hypertext linking. The BT patent is said by some to be among the top ten most controversial patents in the world.⁶

BT's attempt to enforce its patent in a test case against US based ISP Prodigy Communications (Prodigy) recently ended when the United States District Court for the Southern District of New York found against BT on Prodigy's application for summary judgment. Judge Colleen McMahon found that the BT patent was neither directly infringed by Prodigy, nor contributorily infringed by Prodigy when it gave its customers access to the Internet. The decision torpedoed BT's ambitious plan to extract royalties from all US ISPs.

On 12 March 2002⁷, the Court found that BT's patent described "a system in which multiple users, located at remote terminals, can access data stored at a central computer", where that data is stored in blocks of information, each identified by a complete address. The data was sent upon request by the users and received at the remote terminals via telephone lines.

BT argued that the Internet came within this description and that hypertext linking constituted the transmission of blocks of information from "central" servers to users in the manner claimed.

Judge McMahon found that, contrary to BT's argument:

- (a) the Internet contains no "central computer" in the sense required by the BT patent, being a single device which operated as "the hub of a digital information storage, retrieval and display system";
- (b) for this reason, the Internet contains no centralised data store containing all of the blocks of information accessible from the remote terminals as required by the BT patent; and
- (c) the Internet does not contain "blocks of information" which have the characteristics required by the BT patent, in particular,

incorporating a "complete address".

Accordingly, she found that no jury could find that Prodigy had infringed the BT patent or that Prodigy contributed to, or actively induced, infringement by others.

Opponents of patents in the information technology field will welcome the decision. However it is difficult to draw any new principles from it which might assist in determining the parameters of patentability for business methods.

2.2 Europe

Article 52 of the European Patent Convention (EPC) excludes business methods or computer programs "as such" from patentability. However, since the EPC came into force in 1978, more than 30,000 software-related patents have been granted by the European Patent Office, suggesting that the "as such" limitation has been interpreted narrowly.

In the context of business method patents, it appears that where there is some clear implementation of the method claimed, such as on one or more computers, with a "technical effect", then the method may be patentable (subject to the usual principles). An abstract business method in the absence of such means of implementation is unlikely to be accepted.

The United Kingdom courts and Patent Office have strongly criticised business method patents and also view software patents more narrowly than their Continental neighbours. Despite the fact that the expression "manner of manufacture" was removed from the United Kingdom Patents Act 1977⁸, the concept may still influence the British approach to patentability. In 1999, the United Kingdom Patent Office (UKPO) expressly approved the "technical effect" approach but clarified it by saying that only programs which produce a technical effect "which is more than would necessarily follow merely from the running of any program on a computer" would be accepted.

In March 2001, the UKPO published a report entitled "Should Patents be

Granted for Computer Software or Ways of Doing Business"⁹. It concluded that:

- (a) there should be no significant change to the patentability of software;
- (b) the law is not clear enough and clarification of law at the European level is required; and
- (c) business methods should remain unpatentable.

The view of the UKPO was that there was no evidence in any jurisdiction that patentability was required to ensure innovation in computer implemented business systems.

This does not appear to be the view of the European Commission, which presented a proposed Directive¹⁰ in February 2002 which would require all Member States of the European Union to allow patents for computer programs which make a "technical contribution" to the state of the art. In practice, this may not make much difference to the "technical effect" approach, but the Commission is of the view that the "as such" limitation causes too much uncertainty over what can be patented and has led to some inconsistency between Member States at a judicial and administrative level.

Evidently, the Commission's action is based on studies which have indicated an erroneous belief, particularly among small and medium enterprises, that it is not possible to patent computer implemented inventions.¹¹ The proposed directive seeks to clarify the position and ensure the harmonisation of patentability of these inventions across European Union Member States.

The substantive provisions of the proposed Directive impose an obligation on Member States to ensure that computer implemented inventions are patentable, subject only to the conditions that they are susceptible of industrial application, are new and involve an inventive step. The current wording of the proposed Directive, consistent with the Commission's current position, appears to exclude the possibility of granting a patent in relation to software alone, even where the software has the potential to make a technical contribution if run on a suitable computer. The UK Chartered Institute of Patent Agents' Computer

Technology Committee has commented that in this respect the Commission's proposal is "unjustified and highly inappropriate", arguing that claims to computer program products are necessary to ensure a commercially realistic scope of protection.¹²

It has also been argued that the current proposal is unlikely to succeed in its object of increasing clarity and transparency.¹³

2.3 Australia

The background to the Australian position derives from a 1959 decision of the High Court of Australia in *National Research and Development Corporation v Commissioner of Patents*¹⁴ (NRDC). That case established the principle that "a mode or manner of achieving an end result which is an artificially created state of affairs of utility in the field of economic endeavour" is patentable subject matter.

In *CCOM v Jiejing*¹⁵ (CCOM), the Full Federal Court upheld the patentability of a method of characterisation of Chinese character strokes by operating the programmed computer to select the appropriate Chinese characters required for word processing. This decision confirmed that software with clearly articulated results can be patented.

These decisions formed the background to the 2001 decision of the Federal Court in *Welcome Real-Time v Catuity*¹⁶ (Welcome), which upheld the validity of a patent for a method of operating a customer loyalty scheme using a smart card. The invention allowed the chip on the smart card to hold multiple loyalty programs at any one time and enabled the card to be used for instant redemption of points for an award at a point of sale, assuming the necessary points in the applicable loyalty scheme had been accrued.

In that case, Heerey J did not consider the patent to be for a "business method" in the sense of a scheme for carrying on business, but rather it was for a method and device producing an artificial state of affairs, that was more than an abstract idea, and which was beneficial in the field of economic endeavour. The judge found this to be

completely consistent with NRDC and CCOM and so upheld the patent. His Honour also found the US State Street decision useful in reaching that view.

The Welcome decision is widely regarded as authority for the proposition that business methods are patentable in Australia, despite the judge's view that the patent in suit did not merely describe a "business method". The NRDC principles, and their application in Welcome, suggest that Australian courts will adopt a broadly similar approach to that of the US and Europe which is to allow business method (and/or software) patents where there is a reduction of the underlying idea to a clearly identifiable form of implementation ("an artificially created state of affairs of utility").

The Commonwealth Government has asked ACIP to examine the issues raised by business method patents and propose policy options that best meet Australia's national interests and the needs of stakeholders with a view to reporting to the Government in June 2003.

ACIP released an issues paper seeking submissions from interested parties by 10 September 2002.¹⁷ A number of submissions were received¹⁸ and meetings were held with interested parties to discuss their submissions in October and November 2002.

Among the submissions received by ACIP is one from the Australian Information Industry Association (AIIA). Among other things, the AIIA notes that:

"AIIA has no evidence that competition is stifled by the application of the patent system to business systems. This is mainly due to the fact that it is impossible to measure, other than theoretically, the impact of market opportunities foregone."¹⁹

AIIA's submission also indicates that AIIA believes that intellectual property protection generally is "crucial in encouraging innovation and investment in Australia".²⁰

3 Jurisdictional issues

Business method patents may be drafted in such a way that the integers of the claimed invention are, or can

be, located in different places. It is easy to imagine how this could occur with systems that operate via the Internet. This potentially gives rise to significant difficulties in enforcement, with part of allegedly infringing activities occurring outside the patent jurisdiction. Some of the difficulties in enforcement are discussed in detail by Ari Laakkonen in a previous article in this journal.²¹

The United Kingdom Patents Court recently decided in *Menashe Business Mercantile Ltd v William Hill Organization Ltd* (Menashe) that a UK patent for a gaming system involving a host computer and a terminal computer was infringed despite the fact that the host computer was located in the Netherlands Antilles.²² The defendants argued that it was not possible for them to infringe the patent because an essential part of the system was located outside the United Kingdom. The issue was governed by section 60(2) of the Patents Act 1977 (UK), which relevantly provides:

"...a person...infringes a patent for an invention if, while the patent is in force and without the consent of the proprietor, he supplies or offers to supply in the United Kingdom a person other than a licensee or other person entitled to work the invention with any of the means, relating to an essential element of the invention, for putting the invention into effect when he knows or it is obvious to a reasonable person in the circumstances that those means are suitable for putting, and are intended to put, the invention into effect in the United Kingdom."

This provision was intended to implement Article 26.1 of the Community Patent Convention.²³

The applicants argued that the supply of computer programs in the United Kingdom fell within section 60(2) on the basis that it was "supplying...within the UK a person...with means relating to an essential element of the invention, for putting it into effect in the UK". This was accepted by Jacob J, who stated that "Any other result would be monstrous - allowing a defendant to

use supposed cross-border problems to avoid infringement of a system anywhere.”

The outcome of this case may differ in Australia, because the relevant provisions of the Australian Patents Act are worded quite differently from their United Kingdom counterparts. To directly infringe the rights of a patentee, a person must “exploit the invention”. It is not clear whether all aspects of that exploitation must occur in Australia. Ordinary principles of statutory interpretation would suggest that they should, but this would lead to the “monstrous result” referred to by Justice Jacob in *Menashe*.

If the approach in *Menashe* is adopted elsewhere, it would ensure that patents for internet based inventions could be enforced, but would stretch traditional principles of national patent jurisdiction. The position in Australia is not clear, but the High Court has recently heard a defamation appeal²⁴ where the allegedly defamatory material was housed on a server in the US, but was downloaded by users in Australia. The inferior courts held that this constituted publication in Australia and that the defamation action was properly brought in this jurisdiction. The High Court has reserved its decision, but it is foreseeable that the Court’s decision may influence the approach taken to cross-border patent infringement cases in Australia.

4 Conclusion

In the United States, a system may be patentable if it produces a “useful, concrete and tangible” result. In Europe, it will be patentable if it can be implemented with “technical effect”. In Australia, the same system will be patentable if it is a “manner of manufacture within the meaning of section 6 of the Statute of Monopolies”, that is, if it “produces an artificial state of affairs, that is more than an abstract idea, and which is beneficial in the field of economic endeavour”. It is difficult to know whether there is a material difference between these formulations. Each formula is fairly opaque, rather than providing a useful definition of patentability.

Intellectual property in software and business methods is a potentially important balance sheet item. The current level of uncertainty in a number of key jurisdictions in relation to how the test for patentability applies, and whether it should be changed, means that patentees will find it difficult to assess their options for protecting innovations in these fields.

For established technology companies with significant resources, this morass may simply present a drafting challenge for seasoned patent attorneys. For smaller innovators, it may present a significant barrier to achieving meaningful patent protection in key markets.

Although each of the jurisdictions reviewed above may well be converging towards a similar test of patentability for business methods, it would be economically sensible for them to coordinate these efforts and adopt a consistent, preferably identical, test. For Australia, any difference in approach, whether perceived or real, will make this jurisdiction a less attractive venue for investment. It is important for us to monitor developments in this area in other jurisdictions and modify our approach so that we keep in step with international developments.

- 1 This phrase was removed from United Kingdom legislation when the Patents Act 1977 (UK) was enacted.
- 2 ACIP Patenting of Business Systems Issues Paper, p7, available at <http://www.acip.gov.au/Business%20Systems%20Issue%20Paper.PDF>.
- 3 149 F3d 1368 (1998).
- 4 *Ibid.*, p1369.
- 5 *Ibid.*, p1373.
- 6 Quote attributed to Charles Cella in “British firm sues to protect hyperlink patent”, Reuters 7 Feb 2002, <http://www.usatoday.com/life/cyber/tech/2002/02/07/patent-suit.htm>.
- 7 This was a decision in relation to proper construction of disputed claims in accordance with *Markman v Westview Instruments, Inc.* 52 F.3d 967, 976 (Fed Cir. 1995). See decision of McMahon J, 13 March 2002.
- 8 See footnote 1 above.
- 9 Available at <http://www.patent.gov.uk/about/consultations/conclusions.htm>.
- 10 The explanatory memorandum and text of the proposed directive is available at http://europa.eu.int/comm/internal_market/en/indprop/comp/com02-92en.pdf.
- 11 See Tang, P., Adams, J., Pare, D., “Patent Protection of Computer Programmes”;

Final Report on Patent Protection of Computer Programs (ECSC-EC-EAEC, Brussels-Luxembourg, 2001) available at http://europa.eu.int/comm/internal_market/en/indprop/comp/sofstudy.pdf; and Hart, R., Holmes, P. and Reid, J., “The Economic Impact of Patentability of Computers”, Intellectual Property Institute, London, 2001.

- 12 See 2002 31 C.I.P.A.J. 176, fn35, Booton and Mole, “The Action Freezes? The proposed directive on the Patentability of Computer Implemented Inventions” (2002) 3 IPQ 289.
- 13 See Booton and Mole *ibid.*
- 14 (1959) 102 CLR 252.
- 15 (1994) 51 FCR 260.
- 16 (2001) 51 IPR 327.
- 17 Available at <http://www.acip.gov.au/Business%20Systems%20Issue%20Paper.PDF>.
- 18 Some of these can be viewed on the ACIP web site at: http://www.acip.gov.au/bus_submissions/bus_submissions.htm.
- 19 Patenting of Business Systems Issues Paper – AIAA response, p4, available at http://www.acip.gov.au/bus_submissions/AIAA%20Patents%20Submission.pdf.
- 20 *Ibid.*
- 21 Laakkonen, A., “Can Patents for Software and Business Systems be Enforced?”, (2000) *Computers & Law*, December 2000, p5.
- 22 [2002] EWHC 397.
- 23 Article 26.1 provides that: “A Community patent shall also confer on its proprietor the right to prevent all third parties not having his consent from supplying or offering to supply within the territories of the Contracting States a person, other than a party entitled to exploit the patented invention, with means relating to an essential element of the invention, for putting it into effect therein, when the third party knows, or it is obvious to him in the circumstances, that these means are suitable and intended for putting that invention into effect.”
- 24 *Dow Jones & Co Inc v Gutnick*, unreported, 28 May 2002. Judgement has been reserved. [Editorial note: judgement has been handed down since submission of this article. See case note on page 25.]