

US AND AUSTRALIAN COMPUTER IMPLEMENTED INVENTIONS

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The question of whether computer implemented inventions are patentable subject matter is one that continues to defy a straight answer.

In the US, and for those of the view that computer implemented inventions should be protectable, it seems that some optimism can be taken from the recent decision of *CLS Bank International v Alice Corporation Pty. Ltd.*¹

This is perhaps in contrast to the current Australian position, in which the subject matter eligibility ground (manner of manufacture) is not at all clear, and is seemingly invoked by the patent office to dismiss claims directed to computer implemented inventions at will.

The US

CLS Bank and Alice Corporation: Background

Alice Corporation is the patentee of four US patents with claims directed variously to systems, methods, and media. As characterised by the US Court of Appeal for the Federal Circuit, these claims cover:

“... a computerized trading platform for exchanging obligations in which a trusted third party settles obligations between a first and second party so as to eliminate “settlement risk.”²

In the first instance, Alice Corporation’s patents were summarily held to be invalid by the District Court for, *inter alia*, being directed to an abstract concept and therefore failing to claim patent eligible subject matter as required by 35 USC section 101.³

Court of Appeals: The Majority

In July 2012, the United States Court of Appeals for the Federal Circuit reversed the decision of the District Court. In holding Alice Corporation’s patents to be directed to patent eligible subject matter, the Federal Circuit held that

“Unless the single most reasonable understanding is that a claim is directed to nothing more than a fundamental truth or disembodied concept, with no limitations in the claim attaching that idea to a specific application, it is inappropriate to hold that the claim is directed to a patent ineligible “abstract idea” under 35 USC section 101.”⁴

A significant aspect of this test is that if a claim is to be held invalid under 35 USC section 101, not only must the “single most reasonable understanding” of the claim be that it is directed to a fundamental truth or disembodied concept, but no limitations in the claim can attach that idea to a specific application”.

In this the Federal Circuit majority was critical of the approach of the District Court in which claim limitations were ignored in search of an underlying idea or inventive concept. In contrast, the majority in the Court of Appeals decision emphatically held that in assessing eligibility under section 101 a claim must be considered as a whole:

“Any claim can be stripped down, or simplified, removing all of its concrete limitations, until at its core, something that could be characterized as an abstract idea is revealed. But nothing in the Supreme Court’s precedent, nor in ours, allows a court to go hunting for abstractions by ignoring the concrete, palpable, tangible, and otherwise not abstract invention the patentee actually claims. It is fundamentally improper to paraphrase a claim in overly simplistic generalities in assessing

whether the claim falls under the limited “abstract ideas” exception to patent eligibility under 35 USC section 101. Patent eligibility must be evaluated based on what the claims recite, not merely on the ideas upon which they are premised.”⁵

This decision does seem to paint a positive picture as to the patentability (as a fundamental question) of computer implemented inventions in the United States.

For those in opposition to patenting computer implemented inventions, it is noted that this is not a blanket decision that all such inventions should be patentable. Even if an invention satisfies 35 USC section 101, it must still be found to be novel (under 35 USC section 102), non-obvious (35 USC section 103), and fully disclosed, enabled, and claimed with particularity (35 USC section 112). As pointed out by the Federal Circuit⁶, there may well be cases where issues of validity can be more clearly (and, arguably, appropriately) resolved with reference to these requirements.

Court of Appeals: The dissent

While the Federal Circuit judgement does look to be a positive step towards the patentability of computer implemented inventions, optimism on this front should be cautious.

The judgement is a majority judgement, with the dissenting judge (Prost) being very critical of the majority for, in her opinion, flying directly in the face of Supreme Court Precedent:

“The majority has failed to follow the Supreme Court’s instructions—not just in its holding, but more importantly in its approach. The majority does not inquire whether the asserted claims include an inventive concept”⁷

With this in mind it is certainly not the case that the issue of subject matter eligibility of computer implemented inventions in the US has been laid to rest.

Australia

Although not binding in Australia, it is interesting to contrast the approach set forth by the majority in CLS Bank and Alice Corporation with the Australian position.

In order to be valid, claims of an Australian patent must be directed to a “manner of manufacture”. At the Judicial level, the interpretation of the manner of manufacture requirement with respect to computer implemented inventions is set forth in the decision of *Grant v Commissioner of Patents*⁸. In this decision the Full Federal Court held that:

“A physical effect in the sense of a concrete effect or phenomenon or manifestation or transformation is required. In NRDC, an artificial effect was physically created on the land. In *Catuity* and *CCOM* as in *State Street* and *AT&T*, there was a component that was physically affected or a change in state or information in a part of a machine. These can all be regarded as physical effects.”⁹

It is noted here that both *State Street* and *AT&T* are US decisions, suggesting while not necessarily persuasive, the Australian Courts are not oblivious to the approach adopted by the US.

The test set forth in *Grant* appears, on its face, to be a relatively simple and expansive exposition as to what will be considered a manner of manufacture. The Australian patent office’s interpretation of the test is, however, less clear and more limiting.

In addition the requirements explicitly put forward in *Grant*, the Australian patent office reads into the manner of manufacture test a further requirement that:

“... the “concrete effect or phenomenon or manifestation or transformation” ... must be one that is significant both in that it is concrete but also that it is central to the purpose or operation of the claimed process or otherwise arises from the combination of steps of the method in a substantial way.”¹⁰

Many applicants with patent applications directed to computer implemented inventions will have received manner of manufacture objections on this basis: i.e. that even though a claimed invention includes a concrete or physical effect, this effect is incidental to “the invention” and does not result in the claims being a manner of manufacture.

At one level, this appears to be analysis akin to that which the majority in CLS Bank and Alice caution against – i.e. an exercise of rewriting patent claims in order to identify a fundamental underlying invention, and thereby ignoring positively cited claim features.

As highlighted in the patent office decision of *Myall Australia v RPL Central Pty Ltd*¹¹, the approach of the patent office also seems to blur the boundaries between the manner of manufacture requirement and novelty/inventive step.

In *Myall*, the hearing officer relied on the patent office decision of *Invention Pathways Pty Ltd* to support a finding that the claimed invention was not for a manner of manufacture. The crux of the

objection was that the claimed invention appeared to the hearing officer:

“... to have no physical effect *other* than would arise in the computer with standard software in conventional use ... [and that] there is no *substantial* effect of transformation in generating the questions by concatenating text matters.”¹² (Emphasis added.)

The corollary of this statement seems to be that if a physical effect arises as a result of non-standard software, or the non-conventional operation of standard software, the claims would be directed to a manner of manufacture. Indeed the hearing officer goes on to state that if certain processing steps described in the patent specification (namely generating questions automatically based on the identification of keywords) were incorporated into the claims, this would result in:

“... a substantive transformation of data not amounting to a mere cut and paste, and would thus satisfy the requirements of a manner of manufacture.”¹³ (Emphasis added.)

It is not entirely clear where the line between a non-substantive transformation of data (not a manner of manufacture) and a substantive transformation of data (a manner of manufacture) is drawn, or how one identifies it.

The answer to this question appears particularly elusive given the finding of the hearing officer in *Myall* that all claims were novel over the cited art. This perhaps suggests that not only is the question of patentable subject matter tied to novelty, but that something more than novelty is required if a computer implemented invention is to be taken beyond “standard software in conventional use” and be considered by the patent office to be a manner of manufacture.

The final, ill-fitting piece to this puzzle is that the patent in suit in *Myall* was an innovation patent. Any manner of manufacture test extending beyond novelty, therefore, could surely not extend to a consideration of inventiveness.

Where to from here

It seems that in both the US and Australia the uncertainty as to the patentability of computer implemented inventions remains.

In the US, *CLS Bank v Alice* does breed a cautious optimism. It remains to be seen, however, whether the reasoning of the majority or the dissenting judgement will find approval in future decisions.

In Australia, although the test put forward by the Federal Court seems straight forward, the issue is very clouded by the patent office’s interpretation and application. It seems fair to say that until further direction on this front is provided by the Courts no clear resolution will be forthcoming.

Endnotes

- [***CLS Bank International v. Alice Corporation Pty. Ltd. No 2011-1301 \(Fed. Cir. July 9 2012\) at 2 \(majority judgement\).***](#)
- [***CLS Bank International v. Alice Corporation Pty. Ltd. No 2011-1301 \(Fed. Cir. July 9 2012\) at 2 \(majority judgement\).***](#)
- [***CLS Bank International v. Alice Corp., 768 F. Supp. 2d 221 \(D.D.C. 2011\)***](#)
- [***CLS Bank International v. Alice Corporation Pty. Ltd. No 2011-1301 \(Fed. Cir. July 9 2012\) at 21 \(majority judgement\)***](#)
- [***CLS Bank International v. Alice Corporation Pty. Ltd. No 2011-1301 \(Fed. Cir. July 9 2012\) at 19 \(majority judgement\)***](#)
- [***CLS Bank International v. Alice Corporation Pty. Ltd. No 2011-1301 \(Fed. Cir. July 9 2012\) at 13 \(majority judgement\)***](#)
- [***CLS Bank International v. Alice Corporation Pty. Ltd. No 2011-1301 \(Fed. Cir. July 9 2012\) at 3 \(dissenting judgement\)***](#)
- [***Grant v Commissioner of Patents \[2006\] FCAFC 120***](#)
- [***Grant v Commissioner of Patents \[2006\] FCAFC 120 at paragraph 32***](#)
- [***Invention Pathways Pty Ltd \[2010\] APO 10 at paragraph 38***](#)
- [***Myall Australia v RPL Central Pty Ltd \[2011\] APO 48***](#)
- [***Myall Australia v RPL Central Pty Ltd \[2011\] APO 48 at paragraph 55***](#)
- [***Myall Australia v RPL Central Pty Ltd \[2011\] APO 48 at paragraph 59***](#)

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