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# Aspirating IP v Vision Systems.

Revisiting the law on novelty and inventive step in patent cases. The recent decision in Aspirating IP Limited v Vision Systems Limited is a comprehensive analysis of the principles applicable to assessing novelty and inventive step.

• See page 2



# What are your intellectual assets worth? A strategic perspective.



Think about the strategic value of your intellectual assets before defining their worth.

• See page 4



Meet our newest associates



Dr Grant Jacobsen



Dr Ken Simpson



Ian Lindsay

We welcome Grant, Ken and Ian as Associates of Watermark and congratulate them on their appointment. Check out their profiles on our website [www.watermark.com.au/about-us/our-people](http://www.watermark.com.au/about-us/our-people)



# Aspirating IP v Vision Systems: Revisiting the law on novelty and inventive step in patent cases.



The recent decision in *Aspirating IP Limited v Vision Systems Limited*<sup>1</sup> is a comprehensive analysis of the principles applicable to assessing novelty and inventive step. Aspirating IP (formerly Airsense Technology Pty Ltd) was the owner of the disputed patent application for a smoke detection system.

## Decision

At the outset, Besanko J noted that 'an opposition will only be upheld where it is practically certain that the patent, if granted, would be invalid' and the onus is on the respondent to prove this. He further noted that while 'the primary facts are to be established on the balance of probabilities, the ultimate facts leading directly to a conclusion of lack of novelty or obviousness must be proved to the level of practical certainty'. The onus and standard of proof in an opposition and for assessing validity has thus been reconfirmed.

## Claim Construction

Claim construction was a significant aspect of the case, as the findings on the breadth of certain words would determine whether a feature was disclosed in the prior art and thus the validity of the claims. In particular, Besanko J considered construction of the phrase 'main duct means in the form of sampling duct means of a smoke detection system' of the amended claims. His Honour considered this important as the evidence established that, in Australia, there had been smoke detection systems in the market that used air-conditioning ducts to draw air.

His Honour was of the view that resolving interpretation of the word 'means' was vital and found that it 'is a word of the broadest connotation. It directs attention to the result or effect achieved by something, rather than the reason it was designed or built. It enables one readily to reach the conclusion that an item of plant and equipment might be used for more than one purpose' and further 'the use of the word "means" with sampling duct is significant. It directs attention, not to some inherent or innate quality of an item of plant or equipment, but to its function'. His Honour determined that an air-conditioning duct would also fall within the scope of the claim. This determination had the effect of invalidating the claim.

This confirms the broad scope of the term 'means' in claim construction in Australia – that is, any 'thing' that achieves the desired purpose to which it is put.

## Novelty

His Honour reinforced that the key issue in assessing novelty is to determine whether the alleged anticipation would, if the patent were valid, constitute an infringement, and proceeded to find that a number of prior publications were held to anticipate a number of the amended claims.

In relation to prior use, his Honour found that one of the respondent's witnesses had viewed and photographed an alleged prior disclosure used at CERN, Switzerland. The witness had taken photographs of the CERN system and had subsequently given presentations in Australia at which the photographs were exhibited and detailed explanations given about them. Besanko J held that these presentations constituted public disclosure of the relevant claims in Australia, although the prior use occurred overseas.

## Inventive Step

His Honour noted that the Court was required to look forward from the prior art base to determine what a person skilled in the art is likely to have done when faced with a similar problem. His Honour identified the problem that the patent sought to address as the clogging of filters.

An objection was raised that Vision Systems' witnesses had been 'tainted' by reading the claims of the patent before giving evidence on inventive step. His Honour determined that the evidence the witnesses had given in relation to obviousness was admissible, as it was relevant to matters in dispute, but should not be given any weight.

His Honour concluded that on the evidence it would have been very plain to a skilled worker to use a bypass such that a sample of the air would be passed from the sampling duct through the filter and ultimately to the detector.

As such, his Honour concluded that the invention claimed in Aspirating IP's patent application lacked an inventive step.

## Conclusion

While this decision does not create new law, it provides some comfort that the established principles for assessing novelty, inventive step and claim construction are being applied by the Federal Court.

This case is however a cautionary tale that while claiming inventions using functional terms such as 'means' gives broad protection, the sting in the tail is that it may mean the claim is invalid because it encompasses prior art.

**Robynne Sanders, Director and Lakshmi Rajagopalan, Lawyer, Watermark Intellectual Property Lawyers**

<sup>1</sup> *Aspirating IP Limited v Vision Systems Limited* [2010] FCA 1061



# Bioinformatics methods: intellectual assets of increasing importance.

Publication of the draft sequence of the human genome in February 2001 triggered an explosion in the amount of data being generated by life scientists.

Those with expertise at the laboratory bench had not historically been equipped with the skills to manage, analyse and interpret large data sets, and so the transition to high-throughput science brought with it a need for a new type of cross-disciplinary researcher – the Bioinformatician. Broadly speaking, bioinformatics is the application of computational and statistical methods to problems in biology, and more particularly molecular biology. This includes:

- data management
- inferring genes linked to a disease using genotyping data (linkage analysis)
- analysis of DNA and protein sequence data – for example, to locate regions of the genome that control the expression of particular genes or to predict the function of a novel sequence to assess its suitability as a drug target
- analysis of data from high-throughput platforms such as microarrays and next-generation sequencing
- inference of biochemical pathways and other biological networks.

To gain a general impression of where bioinformatics sits in relation to other ICT/life science crossover technologies, Watermark performed a search for patent publications in IPC classes covering computational methods which also contained keywords relating to biological subject matter. The results of the search, conducted using the Thomson Innovation ThemeScape® tool, are shown in the landscape map at right (Figure 1). The peaks in the map correspond to high concentrations of patent documents for closely related subject matter.

Several of the peaks in the landscape map are of note:

- Peak A covers haplotype identification
- Peak B covers the use of sequence analysis methods to design probes and primers
- Peak C covers gene expression microarray analysis
- Peak D covers image analysis, and includes patent documents covering image analysis for microarrays and other high-throughput measurement platforms.

The bar chart (Figure 2) shows the number of publications as a function of time. The exponential increase between 1999 and 2003 is likely due to the increased availability of public sequence data around that time, most notably publication of the draft human genome in 2001.

It is also interesting to note the identities of the top filers in the set of publications identified by the search (Figure 3). IBM tops the list, with its strong life sciences team producing work in a number of different areas including microarray and sequence analysis and online management of sequence data. Fujitsu ranked second; its applications relate mostly to biometric authentication methods rather than bioinformatics as such. Two of the major players in the microarray industry, Affymetrix and Agilent, are also in the top ten. Affymetrix (red dots) and Agilent (green dots) occupy similar regions of the landscape map, but a major difference is that Affymetrix has several documents near Peak A, reflecting its strength in genotyping chips (SNP chips).

Bioinformatics is often considered by the research sector to be an 'enabling discipline' rather than a field of research in its own right. However, our brief review of bioinformatic patenting activity suggests that companies active in the life sciences recognise the commercial value of techniques being developed by Bioinformaticians.

**Ken Simpson** (with thanks to Nick Solomon and Dan Bolderston for assistance)

Prior to joining Watermark, Dr Ken Simpson held a Post-Doctoral position in the Genetics and Bioinformatics Division at the Walter and Eliza Hall Institute of Medical Research working on new statistical and computational techniques for analysis of high-throughput genomic data, particularly from gene expression microarrays, as well as developing a background in more traditional areas of bioinformatics such as DNA and protein sequence analysis.

Figure 1

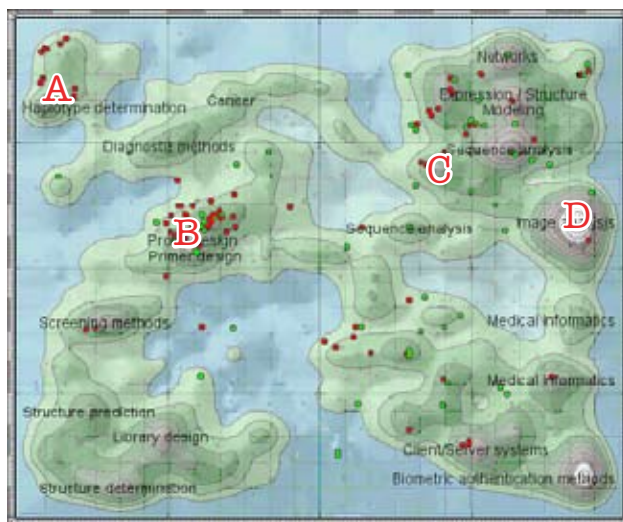


Figure 2

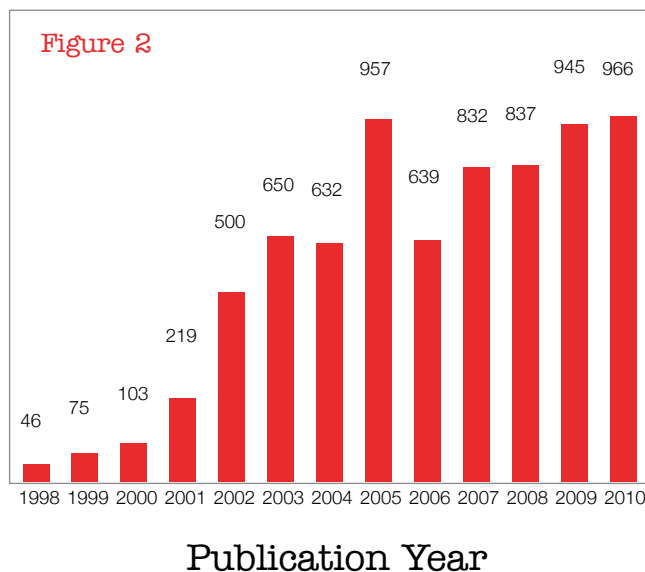
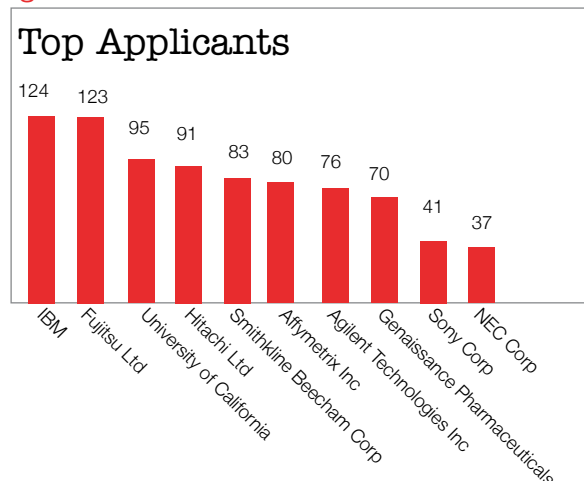


Figure 3





# What are your intellectual assets worth? **A strategic perspective**

When organisations think about the value of their Intellectual Assets (IAs), most immediately think in terms of 'monetisation' – that is, the financial value they can put on their IAs.

Indeed, a monetisation perspective of IA valuation is important in situations such as:

- commercialisation (selling or licensing IAs)
- capital management (IAs as security for lenders, capital financing, IPO, M&A)
- financial reporting and taxation planning
- litigation (calculating the quantum of damages, accounts of profit, cost of settlement in disputes and infringement events).

Financial valuations can be time consuming, inaccurate and dependent on the methodology employed in valuing the assets. They are usually undertaken (and are valid only) at a specific point in time, and for a specific purpose such as those listed above. However, what about at other times? Are you effectively value managing your organisation's IAs?

For many organisations, the real value of their IAs is not in their direct monetary worth. Rather, it is in their strategic value and how they support the organisation's business strategy and competitiveness – for example:

- how they allow the organisation to carry on business or broker deals that, without the IAs, would otherwise not be possible
- how the IAs facilitate business growth, for example improving operational effectiveness or inspiring additional innovation
- how the IAs position the organisation competitively in the market, or provide the business a leadership advantage that effectively excludes competitors from the market.

Below is an example approach to value managing an organisation's IAs. It is most effectively carried out when an organisation brings together its marketing, financial, technical and legal personnel, and takes a coordinated approach.

## Assess

Audit current IAs in the context of the organisation's business strategy and competitiveness. Develop an IA portfolio and determine the 'strategic value' of each IA. Ask questions such as:

- What are the IAs that are vital revenue generators?
- What are the IAs that make (or can make) the organisation more competitive?
- How can the strategic value of the IAs be improved to create opportunities for the organisation?

## Manage

Aligned with business strategy, devise a structured approach to increase the value of the current IAs and create new IAs to support the business.

Allocate resources to the valuable IAs and divert attention away from those that do not assist business goals.

Coordinate IA management with business activities such as marketing, promotion, product design and launch.

Remember that in general IAs must support a business, and that valuable IAs augment business growth and value.

## Review

Periodically review and maintain the currency of the IA portfolio.

Expand the portfolio to include new IAs as they are created.

Review and adapt IA management strategy whenever the organisation's competitive environment and business strategy change.

Periodically re-assess the strategic value of IAs and ensure that they remain aligned with business strategy.

## Robert Koung

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## Meet Roger Green

“In my final year at University I decided against pursuing further academic research and in a dusty basement room at Bristol University I came across a slim booklet entitled “The Career of a Patent Agent”. I thought that would be a career that would suit my analytical skills. And I was right. You never know what invention you'll handle next, and meeting inventors and defining their inventions is intellectually stimulating.”



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