



19 February 2009

PATENTS ACT 1977

APPLICANT Research Affiliates, LLC

ISSUE Whether patent application number
GB 0222239.6 complies with section 1(2)

HEARING OFFICER P R Slater

DECISION

Introduction

- 1 This application was filed in the name of Paul Wood on 25 September 2002 and published under serial number GB 2393532 on 31 March 2004. Following publication the application has been assigned to Research Affiliates.
- 2 Despite amendment of the claims during substantive examination, the applicant has been unable to persuade the examiner that this is a patentable invention within the meaning of section 1(2) of the Act. This matter therefore came before me at a hearing on 10 October 2008. Mr Richard Miller QC, instructed by the patent attorneys Lucas & Co, appeared for the applicant.
- 3 Following the hearing, the Agent filed further evidence on 24 December 2008 in the form of a witness statement signed by Mr George Keane supporting the merit of the application. In making my decision I have read both this statement as well as those in the statement made by Robert Arnott which was available to me at the time of the hearing.

The Application

- 4 The application is concerned with a method for construction of a stock market index. In creating the index accounting data found in a standard company annual report and accounts is used to select a particular stock. These stocks are then weighted according to the accounting data to create an index. The main advantage claimed of using this method is to reduce the volatility of the index when compared to an index based on price or market capitalization such as the FTSE , Dow Jones or NASDAQ indices.

5 The application comprises three independent claims:

Claim 1

A method for the construction and management of a stock market index comprising:

Selecting a group of stocks based upon accounting data that may be found within a standard company annual report and accounts and not based upon price or market capitalization;

Weighting the group of stocks according to the accounting data and not according to the price or market capitalization; and

Creating the index from the selected and weighted stocks;

Whereby the performance of the index is increased and the volatility is reduced compared to a price or market capitalization based index.

Claim 4

A method for the construction and management of a stock market index fund comprising the steps of:

Selecting a group of stocks based upon accounting data that may be found within a standard company annual report and accounts and not based upon price or market capitalization;

Weighting the group of stocks according to the accounting data and not according to the price or market capitalization; and

Purchasing the group of stocks according to the weighting thereof;

Wherein the performance of the index fund is increased and the volatility is reduced compared to a price or market capitalization based index.

Claim 7

A system using company accounting data excluding stock price or market capitalization for the construction and management of a stock market index to increase performance and reduce volatility compared to a price or market capitalization based index, the system comprising:

An index construction manager operable to select a group of stocks based upon accounting data; and

The index construction manager operable to weight the group of stocks according to the accounting data;

Wherein the index construction manager uses accounting data rather than price or market capitalization that may be found within a standard company annual report and accounts.

The Law and its interpretation

6 The relevant parts of Section 1(2) read as follows:

“it is hereby declared that the following (among other things) are not inventions for the purposes of this Act, that is to say, anything which consists of –

- (a) a discovery, scientific theory or mathematical method;
- (b) a literary, dramatic, musical or artistic work or any other aesthetic creation whatsoever;
- (c) a scheme, rule or method for performing a mental act, playing a game or doing business or a program for a computer;
- (d) the presentation of information;

but the foregoing provision shall prevent anything from being treated as an invention for the purposes of this Act only to the extent that a patent or application for a patent relates to that thing as such.

7 The interpretation of section 1(2) has recently been considered by the Court of Appeal in *Symbian Ltd's Application* [2008] EWHC Civ 1066, decided on 8 October 2008. *Symbian* arose under the computer program exclusion, but as with its previous decision in *Aerotel*¹ the Court gave general guidance on section 1(2). Although the Court approached the question of excluded matter primarily on the basis of whether there was a technical contribution, it nevertheless (at paragraph 59) considered its conclusion in the light of the *Aerotel* approach. The Court was quite clear (see paragraphs 8-15) that the structured four-step approach to the question in *Aerotel* was never intended to be a new departure in domestic law; that it remained bound by its previous decisions, particularly *Merrill Lynch*² which rested on whether the contribution was technical; and that any differences in the two approaches should affect neither the applicable principles nor the outcome in any particular case.

8 Subject to the clarification provided by *Symbian*, it is therefore still appropriate for me to proceed (as Mr Miller did at the hearing) on the basis of the four-step approach explained at paragraphs 40-48 of *Aerotel* namely:

¹ *Aerotel Ltd v Telco Holdings Ltd and Macrossan's Application* [2006] EWCA Civ 1371, [2007] RPC 7

² *Merrill Lynch's Application* [1989] RPC 561

- 1) Properly construe the claim
- 2) Identify the actual contribution (although at the application stage this might have to be the alleged contribution); as explained at paragraph 43 this is “an exercise in judgment probably involving the problem said to be solved, how the invention works, what its advantages are”; it is essentially a matter of determining what it is the inventor has really added to human knowledge, and involves looking at substance, not form.
- 3) Ask whether it falls solely within the excluded matter, which (see paragraph 45) is merely an expression of the “as such” qualification of section 1(2).
- 4) If the third step has not covered it, check whether the actual or alleged contribution is actually technical.

Arguments and Analysis

- 9 It is useful before I consider the arguments presented by Mr Miller QC on behalf of the applicants to set out my understanding of the application. I should also record that Mr Miller was very helpful during the hearing and set out a very clear and logical path through the case law in support of his client’s application for which I am thankful.
- 10 As I understand it the most common indices, such as the FTSE 100 and NASDAQ, are based on the market value or capitalization of a particular stock. In these cases the stocks are weighted according to their share price or market value in order to produce an index. The application in hand does not use the market value or capitalization but is based on the use of accounting data found in the company reports or accounts. One example of such data given in the specification is pre-exemption profits. The claimed advantages of using such an index, is that it removes the volatility associated with the use of share prices for example.
- 11 At the outset I should record that, an index constructed using such a method is clearly of use in fund management. Mr Miller made it clear during the hearing that this method has been a commercial success and adopted by a number of organizations. Indeed in his skeleton argument he referred to the fact that some USD 15 billion is being managed by companies who have licensed the use of the index management tool.(It was agreed that this figure may have depreciated somewhat in light of the recent events on World Stock Markets).
- 12 The examiner in the last examination report which has led us to this hearing has maintained an objection that the claims are excluded under Section 1(2)(c) of the Act as a method of doing business. In reaching this conclusion he decided that the contribution was “the fact that the index is based on fundamental company data such as profits rather than market capitalization or share price”.
- 13 Mr Miller did not disagree that this may indeed be a contribution but pointed out that such a view of the contribution was too narrow. To use his words:-

“what you have, in this case, is a method which, when you have actually carried the method out, you get a particular result and that result is an index stands on its own legs, if I can put it that way, and can be traded and is indeed traded in the market place, bought and sold by people who are interested in the financial markets”

- 14 In effect, the argument Mr Miller makes is that the resultant index is in itself a “vendible product” referring in support to the decision in the case of *GEC’s Application (1943) 60 RPC 1* which showed that a product did not have to exist in physical form in order to be patentable.
- 15 Mr Miller then took me on a guided tour of the case law relating to business applications, in each instance seeking to differentiate this application from the cases he referred to. In each case, he made the point that it was the utility of the applicant’s product that was different from the decided cases.
- 16 For example on *Merrill Lynch’s Application [1989] RPC 561* he drew upon the courts view at Page 563 that if a claim could be regarded as producing a result in the form of a technical contribution to the prior art then it would be patentable. However, in this case the result was a trading system and a method of doing business. There was no question that it produced anything of such utility that could be bought or sold in the market place.
- 17 Mr Miller then went on to draw my attention to the decisions in *Shoppolotto [2006] RPC 7*, *Oneida [2007] EWHC 954 (Pat)*, *Crawford’s Application [2006] RPC 345* and *Raytheon’s Application [2008] RPC 3*. In each case Mr Miller distinguished his client’s application from these authorities making the point that

“the index, although produced by the method, is neither the method nor the very business itself”

- 18 Mr Miller also drew my attention to the recent decision of the Court of the Appeal in *Symbian* and its relationship with the earlier decision of the court in *Aerotel*. Mr Miller made it quite clear that he felt *Symbian* was supportive of his applicant, as he felt it required a deeper investigation of the facts of the case. In summary, he stated

“Is this application just a method of doing business as such. We say no, it is a bit more. It produces something useful and that can go out in the market and be traded”

- 19 It is this idea that the resultant index is a product in its own right that goes straight to the heart of the decision I must make. I therefore have two questions to ask in making this decision:
- 1) Is the creation of an index excluded as a business method and
 - 2) If it is excluded then would claiming it as a product that can be sold or licensed provide a contribution, technical or otherwise, that takes it out the excluded matter objections.

- 20 In respect of the second point, it is noted that there are no claims directed to a

product at the time of the hearing. However, as one of the key arguments presented by Mr Miller, I believe it is appropriate to consider whether a set of claims directed to a product would provide a patentable invention and overcome any objection that the creation of an index is excluded as a business method.

Applying the Aerotel/Macrossan Test

- 21 The first step of the test requires me to construe the claims. I do not believe that this presents any difficulty. The claims are clearly directed to a method and system for creating an index which can be used to manage a stock market fund.
- 22 The second step is to determine the contribution. As I have set out above it is here that we differ to some extent in our interpretation of the contribution.
- 23 The use of indices in fund management is well known. The only possible contribution that can be deduced is how the stocks to make that index are selected. In short the contribution lies in selecting stocks by accounting data rather than market capitalization or price.
- 24 There is little doubt in my mind that the contribution of the independent claims is the creation of an index for use in asset/fund management. This is well exemplified by claim 4 and indeed by the examples given in the papers provided by the applicant that refer to companies who are using the index.
- 25 The third step is to decide if this contribution lies solely in an excluded area. Mr Miller made it clear in his arguments that he was of the opinion that the existence of the index as a commercial product takes it out of the exclusion as this index is
- “...more reliable, less volatile reduces herding. These are technical contributions, on a practical level, They are not just conceptual things. They are real contributions”.*
- 26 In determining if the application falls wholly within an excluded area it is appropriate that I determine the answer to the two questions I posed earlier – Is the creation of the index excluded as a business method. I have no doubt that it is – the selection of stocks for an index is clearly a business decision on behalf of the creator of the index. It requires business acumen or skill rather than technical skill.
- 27 Normally, I would not need to complete the fourth step of the test as your application has failed the third step. However, following the decision of the Court of Appeal in *Symbian*, in this case I think it is essential that I complete the step in order to establish if the application makes a “technical contribution”.
- 28 In addressing me, Mr Miller made much of the applicant’s assertion that this is a very technical field in which highly qualified people operate. I do not disagree with this assertion but I do not see how this can provide any assistance to the argument that the application is not excluded. Specifically, the area in which this application is designed to operate is economic or financial rather than an area of technology. Any advantages gained or contribution made from using the claimed invention lie in economic rather than technical fields. It is argued that this avoids

the problem of volatility and herding. However, these are economic or business problems associated with fund management and are not technical. As such the application makes no technical contribution and if I am to follow the Court of Appeal in *Symbian* it remains excluded as a business method.

29 Having answered the first of my questions I now turn to the second question – Would claiming the index as a product overcome the business method exclusion? I do not believe that it would. Mr Miller argued quite eloquently that the index which is generated by the invention is a “vendible product”, a “tool” which could be sold separately and could not therefore be regarded as a method of doing business as such. Whilst this argument is appealing, in that you could regard an index as a “vendible product”, as something which itself could be used in business, I cannot accept that it is independent of the underlying business method. If the generation of documents in *Aerotel* for use in forming a company constitutes a business method, then so does the generation of an index for use in managing a stock market fund.

30 Furthermore, there are a number of authorities that support this decision. Firstly, in *Merrill Lynch*³ before the Court of Appeal Fox LJ stated at page 569, in remarks obiter:

“Genentech decides the reasoning of Falconer to be wrong. On the other hand, it seems to me to be clear, for the reasons indicated by Dillon LJ, that it cannot be permissible to patent an item excluded by Section 1(2) under the Guise of an article which contains that item – that is to say, in the case of a computer program, the patenting of a conventional computer containing that program.

31 Secondly in *Gales Application* [1991] RPC 305 which was referred to in the recent *Symbian* case, Nicholls LJ held that:

“Instructions to be used in a computer were not patentable. Such instructions had to be recorded in a physical form from which a computer could understand, typically a disc or ROM, which was no more than an established type of artifact in which the instructions were embedded. If the disc or ROM, considered as a disc or ROM, was in all respects conventional, a claim could not be made for the disc or ROM incorporating those instructions.

32 In the case of *Gale* the application was directed to a new method of calculating square roots. This in itself was excluded as a mathematical method and could not be saved by claiming it as a product in this case a suitably programmed ROM chip. This is analogous in many ways to your application as it makes clear that an invention lying in an excluded area cannot be saved by claiming that the contribution is a new product.

33 More recently, Kitchen J in *Astron Clinica* [2008] EWHC 85 (Pat) endorsed the view of the court in *Gale* when at paragraph 54 of the decision when discussing the decision of Floyd J in *Oneida Indian Nations Application* [2007] EWHC Civ

³ *Merrill Lynch* [1989] RPC 569

0954 (Pat) where he stated:

“... His reasoning must be considered in the light of his earlier conclusion that, in addition to the business method exclusion, the technical advantages relied upon were solely those which would result from placing the new method on a computer. The deputy judge observed that the mere inclusion of a program on a carrier is not enough to circumvent the exclusion”.

- 34 I therefore have three persuasive authorities before me. Though the specific circumstances in each case differ from your application, I believe each makes it clear that for a product to be considered patentable the method underlying that product must also be patentable. The mere claiming of a product does not confer patentability upon an invention. For that reason the answer to my second question must be no.

Conclusion

- 35 For the reasons set out above I find that the invention is excluded under Section 1(2) because it relates to a business method as such. Having carefully reviewed the specification, I cannot see any possible saving amendment. I therefore refuse the application under Section 18(3).

Appeal

- 36 Under the Practice Direction to Part 52 of the Civil Procedure Rules, any appeal must be lodged within 28 days.

P R SLATER

Deputy Director acting for the Comptroller