



BL O/182/07

28 June 2007

PATENTS ACT 1977

APPLICANT HotSpot FX, Inc.

ISSUE Whether patent application number
GB 0507205.3 complies with section 1(2)

HEARING OFFICER A Bartlett

DECISION

Introduction

- 1 This decision concerns UK Patent application number GB0507205.3 entitled "System, method and apparatus for restricting matching of automated trades" claiming priority from an earlier US application dated 08 April 2004 and published as GB 2412985 A on 12 October 2005.
- 2 The examiner has reported that the invention is excluded from patentability as a method of doing business and program for a computer. Various rounds of correspondence and amendment with the Applicants (via their Agent Mr Russell Barton of the Attorneys Withers & Rogers) failed to resolve this issue and consequently a hearing was arranged for 29 May 2007. However in their Agent's letter dated 25 May 2007 the Applicants withdrew their request for a hearing and opted instead for a decision on the papers.

The application

- 3 The application relates to a system for facilitating transactions of financial instruments between a plurality of trader workstations. The latest amendments to the application were filed on 2 March 2007. These include 12 claims of which claims 1 and 10 are independent system and method claims and claim 12 is an omnibus claim. For the purpose of this decision I shall focus on claims 1 and 10.
- 4 Claim 1 reads:

A computerized trading system for facilitating transactions of financial instruments between a plurality of trader workstations, said computerized trading system comprising:

a bid and offer recorder connected in communication with the trader workstations and configured to record a plurality of bids and offers from the trader work stations, each of the bids and offers having transaction information including at least a price, a quantity and a type of financial instrument, the transaction information of each of the bids and offers includes automation data usable to indicate that the bid or offer is automated;

a matching engine connected in communication with the bid and offer recorder and capable of receiving the bids and offers from the bid and offer recorder, said matching engine configured to compare the bids and offers and to match bids with offers using the price, quantity and type of financial instrument associated with each of the bids and offers;

a communication device configured to send data containing details of matched bids preferably for display by the trader workstations and

a trade restrictor connected in communication with the bid and offer recorder and the matching engine, wherein the trade restrictor is configured to receive the bids and offers from the bid and offer recorder, detect at least one of the bids and offers that is automated, finding the automation data and to block matching, by the matching engine, of bids and offers when the automation data indicate at least one of the bids and one of the offers of a potential match are automated.

5 Claim 10 reads:

A method of preventing instability of a computerized trading system for facilitating transactions of financial instruments between a plurality of trader workstations, by blocking selected bids or offers from matching said method comprising the steps of:

recording a plurality of bids and offers communicated to the trading system from the trader work stations, each of the bids and offers having transaction information including at least a price, a quantity and a type of financial instrument, the transaction information of each of the bids and offers includes automation data usable to indicate that the bid or offer is automated;

receiving the bids and offers from the bid and offer recorder, detecting at least one of the bids and offers that is automated, finding the automation data and blocking matching, of bids and offers when the automation data indicate at least one of the bids and one of the offers of a potential match are automated

comparing the bids and offers;

matching the bids and offers using the price, quantity and type of financial instrument associated with each of the bids and offers;

sending data containing details of matched bids and preferably display the details at the trader workstations

The law and its interpretation

6 Section 1(2) of the Patents Act 1977 identifies certain types of subject matter for which patent protection is not available. The relevant parts of this section

read:

1(2) 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)

(b)

(c) a scheme, rule or method for performing a mental act, playing a game or doing business, or a program for a computer;

(d).....

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

- 7 How these provisions should be interpreted was the subject of a good deal of scrutiny by the courts during the prosecution of the application. The final rounds of argument were based on the approach approved by the Court of Appeal in *Aerotel Ltd vs Telco Holdings Ltd & Macrossan's Patent Application* [2007] RPC 7. It is that approach that I must follow in deciding whether the invention is patentable. I will however consider the arguments put forward under the previous approaches where they are relevant.
- 8 These provisions are designated in section 130(7) as being so framed as to have, as nearly as practicable, the same effect as the corresponding provisions of the European Patent Convention (EPC), i.e. Article 52. However, the decisions of the Boards of Appeal of the European Patent Office under Article 52 of the EPC do not bind me and their persuasive effect must now be limited in view of the contradictions in the Boards' decisions highlighted by the Court of Appeal in *Aerotel/Macrossan* and its express refusal to follow EPO practice.
- 9 The test for assessing patentability approved by the Court of Appeal in *Aerotel/Macrossan* comprises the following four steps:
- (1) properly construe the claim
 - (2) identify the actual contribution;
 - (3) ask whether it falls solely within the excluded subject matter;
 - (4) check whether the actual or alleged contribution is actually technical in nature.
- 10 However, as stated in paragraphs 45 – 47 of the judgment, reconciling the new test with the earlier judgments of the Court of Appeal in *Merrill Lynch*¹ and *Fujitsu*², the fourth step of checking whether the contribution is technical may

¹ Merrill Lynch [1989] RPC 561

² Fujitsu [1997] RPC 608

not be necessary because the third step – asking whether the contribution is solely of excluded matter – should have covered that point.

- 11 In addition to adopting a new approach to assessing excluded matter, the Court of Appeal in *Aerotel/Macrossan* provided some additional insight on issues relevant to deciding the present case. First the Court made it clear that deciding whether an invention was excluded was a question of law and thus there was no benefit of the doubt to be enjoyed by the Applicant in applying these provisions. Additionally, the Court made it clear that the excluded categories are not exceptions to what is patentable, rather S1(2) sets out positive categories of things which are not to be regarded as inventions. Accordingly the general UK and European principle of statutory interpretation that exceptions should be construed narrowly does not apply to them.

Applying the test

- 12 The Court described the first step, properly construing the claim, as something that always has to be done and involves deciding what the monopoly is before going on to the question of whether it is excluded. Neither the Applicants nor the examiner saw any particular problem in construing the present claims and instead focused their attention on steps 2 and 3. Whilst I agree to a point, there are a number of aspects that I feel I should comment on.
- 13 First, both independent claims contain an optional feature – the “preferable” display of details of matched bids at the trader workstations. The presence of optional features in an independent claim is undesirable but no objection has been raised against this. I will proceed on the basis that this feature is absent from both claim 1 and claim 10. Ultimately however I do not think this will have any bearing on the on the patentability of the invention.
- 14 Second, both independent claims suggest that matching *by the matching engine* is blocked when at least one of the bids or offers is automated. I note however from page 5 of the description that the inhibit action can involve stopping automated bids being recorded or by preventing matches involving automated bids or offers from clearing, rather than by necessarily blocking matching per se. Again no objection on this point has been raised but I will proceed on the basis that the system operates to prevent a transaction being completed if a bid or offer is automated.
- 15 Finally I note that claim 10 is introduced as “a method of preventing instability of a computerized trading system” where bids and offers are communicated from trader work stations and data on matched bids is sent to the workstations. However, it is not explicit in the claim that the steps of detecting automation data and matching or blocking the bids and offers are automated. In addition to this it is stated on page 10 of the description that:

“Similarly, each of the systems described herein, in various embodiments, may include a collection of manual and automated processes and components. To this end, the term “computerized” as used herein denotes the use of various electronic and automated processes, but not

necessarily an entirely electronic and automated process.”

- 16 Thus claim 10 appears to cover a method where the detection and blocking of automated bids is carried out manually. That is not an issue that was raised by the examiner and for the time being I will proceed on the basis that the whole process is automated. However, I will need to consider the implications of the semi-automated possibility should I find the fully automated embodiment to be patentable.
- 17 As for the second step, in paragraph 43 of the *Aerotel/Macrossan* judgment the Court said that “What has the inventor really added to human knowledge perhaps best sums up this exercise”. In that paragraph the Court also restated its previous findings that in identifying the actual contribution it is substance that matters rather than the form of claim. Thus the fact that as drafted the present claims require the existence of computing means is not decisive in deciding whether the invention relates to excluded subject matter. Indeed the Applicants have not attempted to argue that the trading system hardware through which the invention is implemented is anything other than conventional. From comparison with the prior art acknowledged in the specification it is clear that the contribution resides in the functionality that hardware is programmed to provide.
- 18 The precise identification of the contribution has though been the cause of some disagreement between the examiner and the Applicants. For his part the examiner considers the contribution to be a computerized trading system which predicts if bids and offers are automated and if so they are restricted in what they can match with.
- 19 The Applicants, in their Agent’s letter dated 12 February 2007, have accepted this as an accurate assessment of the novel and inventive features of the invention, but go on to say that the contribution includes the result of this, namely “a more stable computerized trading system which will be prevented from crashing when there are too many matches in too short a space of time.
- 20 As well as equating step 2 to asking “what has the inventor really added to human knowledge” in paragraph 43 of the *Aerotel/Macrossan* judgment, the Court also appeared to accept the submission of Comptroller’s Counsel that identifying the contribution “it is an exercise in judgment probably involving the problem said to be solved, how the invention works, what its advantages are”. Thus it appears that the problem solved or advantage achieved plays a part in identifying the contribution made by an invention.
- 21 In the present case preventing instability is an explicit feature of claim 10 but is not mentioned in claim 1. That though does not in my view prevent the result forming part of the contribution. Inhibiting the matching of automated bids is stated in the description to provide a number of advantages and along with improving market depth, improving stability of the system is clearly identified. Thus I think it appropriate to take account of the result achieved (or problem sought to be overcome) in identifying the contribution made by the invention.

- 22 In their Agent's letter of 12 February 2007 the Applicants also argued that the system was "a form of data communication network". In doing so the Applicants appeared to be attempting to stress the technical nature of the invention with particular reference to the decision of the Comptroller's Hearing Officer in *Sony*³ when arguing that the present invention was patentable. Whilst I accept that the various elements of the system do inevitably exchange data, I do not think it right to categorize it as a communication system; it is a networked computerized trading system. Thus *Sony* and *Aerotel* do not in my view support the Applicants' case in this respect.
- 23 In my view the contribution made by the invention is a computerized trading system which prevents transactions being completed if it is determined that bids or offers are automated with the result that the trading system is more stable and less likely to crash when there are too many trades in too short a time.
- 24 What I must now do is decide whether that contribution falls solely within excluded subject matter. As I have already stated, the invention is implemented on conventional computerized trading hardware and the contribution resides in the functionality that hardware is programmed to provide. From the prior art acknowledged in the specification it was known at the priority date to impose specific matching limitations in such a system – for example limitations may be imposed upon the brokers that a particular broker can deal with and or credit limits can be used to inhibit matches. What the present invention does is impose a different limitation when matching bids and offers - the match being inhibited when at least one bid or offer is deemed to be automated.
- 25 The examiner reported that in his view the increase in stability provided by the invention was not achieved by a technical solution but by changing the business rules of the system (so as to exclude automated bids or offers). For their part, the Applicants argued that the business method was conducted in the matching engine and that since the operation of the matching engine was unaffected by the invention, the contribution could not be said to be a method of doing business.
- 26 I think that relies upon too narrow an interpretation of what constitutes the business process in the claimed invention. In my view it is not just the matching process that is the business method, rather the whole process of receiving and storing bids and offers, matching them and transmitting data on matched bids to users is a business method. The imposition of a restriction to block automated bids forms part of that business method. Thus I agree with the examiner that the problem of improving stability is overcome by a change to the rules of the trading system - inhibiting automated bids - rather than by making some change to the way the computer system operates. In my view, a change to the rules of the trading system by modifying the criteria under which bids and offers can be matched or transactions completed is a new method of doing business. The system is only more stable because a category of trades

3 Sony UK Limited's application GB0207020.9 BL O/010/07

is inhibited rather than say the system being able to fully process the same number of bids and offers without crashing.

- 27 Thus in my view the contribution falls solely within the business method exclusion.
- 28 In addition, since the contribution resides solely in the functionality the hardware is programmed to provide, I also find it to fall solely within the computer program exclusion.
- 29 Given my finding above I do not need to apply the fourth step of the test.
- 30 Having found the invention of claims 1 and 10 to be excluded even when fully automated I do not consider it necessary to consider the semi-automated embodiment that is mentioned in the description and covered in claim 10 – I can see no way that such an embodiment could be patentable if the fully automated version is excluded.
- 31 The remaining claims provide further details of the way the system is implemented. I can see nothing in any of them that is any more patentable than the independent claims.

Decision

- 32 I have concluded that the invention is excluded from patentability 1(2)(c) as a method of doing business and a program for a computer as such. I can see no subject matter in the other claims or indeed anywhere else in application that could form the basis of a patentable claim.
- 33 I therefore refuse the application under section 18(3) as relating to subject matter excluded under section 1(2).

Appeal

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

A BARTLETT

Deputy Director acting for the Comptroller