



BL O/329/05

20 December 2005

PATENTS ACT 1977

APPLICANT Fair, Isaac and Company, Incorporated

ISSUE Whether patent application number GB
0308726.9 complies with Section 1

HEARING OFFICER A Bartlett

DECISION

Introduction

- 1 International patent application number PCT/US2001/030193, entitled “Score based decisioning”, was filed in the name of HNC Software Inc. on 26 September 2001. The international application claimed priority from US application number US09/675992, was searched by the USPTO and published as WO02/27610 A1 on 4 April 2002. An International Preliminary Examination Report was issued 30 June 2002.
- 2 Following a change of name, the application continued in the name of Fair, Isaac and Company Incorporated, entered the national phase in the UK as patent application number GB0308726.9 and was republished as GB2384087 on 16 July 2003.
- 3 Throughout the examination process the examiner reported that the invention was excluded as both a method for doing business and a program for a computer. Various other objections were also raised regarding lack of novelty, inventive step and clarity. However, consideration of novelty and inventive step were deferred pending resolution of the excluded matter objection. Despite numerous rounds of correspondence the examiner and applicant have been unable to reach agreement as to the patentability of the invention. The applicant declined the opportunity to attend a hearing on the issue and opted instead for a decision to be issued based on the papers on file.
- 4 During the latter stages of the examination process, the Patent Office adopted a new approach to assessing whether an invention relates to unpatentable subject matter. The new approach was explained in the Practice Notice¹ issued by the Office on 29 July 2005 and reflects the approach adopted by Peter Prescott QC, sitting as Deputy Judge, in his judgment in *CFPH*². In addition to *CFPH*, the issue of patentability and

¹ Patent Office Practice Notice: Patents Act 1977: Examining for Patentability” see <http://www.patent.gov.uk/patent/notices/practice/examforpat.htm>

² *CFPH LLC's Application [2005] EWHC 1589 Pat*

excluded matter has also been considered in three other recent court decisions, namely *Halliburton*³, *Shopalotto*⁴ and *Crawford*⁵. The applicant was given the opportunity to submit observations regarding the patentability of their invention in light of these judgments and the new test but declined to do so.

Background

5 In broad terms the application is concerned with enabling transactions to be carried out over a computer network such as the internet. As anyone who is familiar with internet shopping will be aware, fraud is a potentially serious problem in that environment. As the application recognises, it is often the retailer who is responsible for picking up the bill for any fraud that does take place. Consequently retailers employ a range of security measures to try to reduce the risk to which they are exposed. Commonly this involves asking a potential customer to enter details such as their name, address, a password, memorable date, mother's maiden name and the like as part of a verification process before any goods are despatched. Clearly increasing the number of questions asked brings added security. But it also brings with it a risk that the customer will lose patience and give up before a transaction is completed. The present invention seeks to overcome this problem by providing a mechanism for deciding the questions to be put to potential customers to strike the optimum balance between security and customer friendliness.

6 The claims I am required to consider were filed on 5 January 2005. They number 36 in total of which claims 1, 18, 24, 29, 31, 34 and 35 are independent computer implemented method, request processing system or graphical user interface claims. I am content that they all relate to the same inventive concept which I shall discuss in more detail below but for the purposes of this decision I feel I only need reproduce claim 1 to give a flavour of the invention:

1. A computer-implemented method for processing a request for an interaction over a computer network, comprising:

- receiving a request for an interaction from a user, the request including a first set of interaction data for variables descriptive of the interaction;
- determining a value of the interaction based on the first set of interaction data;
- determining, for each of a plurality of question sets, a probability of non-attributed fulfilment after use of the question set based on a metric of the value of the data provided by the question set and on a likelihood that the user will terminate the interaction if the user is presented the follow-up question set; and
- responsive to the value of the interaction, performing at least one of:
 - terminating the interaction;
 - proceeding with the request for an interaction; or
 - obtaining additional data from the user by presenting to the user the question set with the greatest probability on non-attributed fulfilment.

3 *Halliburton Energy Services Inc v Smith International (North Sea) Ltd and others* [2006] RPC 25

4 *Shopalotto.Com's application* [2005] EWHC 2416 (Pat)

5 *Cecil Lloyd Crawford's application* [2005] EWHC 2417 (Pat)

The Law

- 7 The examiner has reported that the application is excluded from patentability under section 1(2)(c) of the Act as relating to a method for doing business and a program for a computer. 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.”

- 8 These provisions are designated in Section 130(7) as being so framed as to have, as nearly as practicable, the same effect as Article 52 of the European Patent Convention (EPC), to which they correspond. I must therefore also have regard to the decisions of the Boards of Appeal of the European Patent Office that have been issued under this Article in deciding whether the invention is patentable though I am not bound to follow them.

Interpretation

- 9 As I have already said, in his judgment in *CFPH*, Peter Prescott QC provided a new test to be applied when determining whether an invention relates to unpatentable subject matter. This test was discussed at paragraph 95 of his judgment and was the subject of the Practice Notice I referred to earlier which summarised the test as comprising the following two steps:

Identify what is the advance in the art that is said to be new and not obvious (and susceptible of industrial application).

Determine whether it is both new and not obvious (and susceptible of industrial application) under the description “an invention” in the sense of Article 52 of the European Patent Convention (EPC) — broadly corresponding to section 1 of the Patents Act 1977.

- 10 The judgments in *Hallibuton*, *Shopalotto* and *Crawford* each express the approach for assessing patentability in slightly different terms. In *Halliburton*, Pumfrey J. said at paragraph 215:

“The contribution the inventor makes must lie in a technical effect, and **not merely in excluded subject matter.**” (my emphasis)

- 11 In *Shopalotto* he said at paragraph 9 in relation to computer programs:

“...that the approach is to ask what it (the programmed computer) contributes to the art over and above the fact that it covers a programmed computer. If there is a contribution outside the list of excluded matter, then the invention is patentable, but **if the only contribution to the art lies in excluded subject matter, it is not patentable.**” (my emphasis)

and at paragraph 11 line 4:

“It follows that an inventive contribution cannot reside in excluded subject matter”.

- 12 Finally Kitchin J., having discussed the *Fujitsu*⁶, *Halliburton* and *CFPH* decisions, said at paragraph 11 of his judgment in *Crawford*:

“At the heart of all these decisions is the consistent principle that an invention must make a contribution to the art (that is to say the invention must be new and not obvious) and that contribution must be of a technical nature (susceptible of industrial application and not within one of the areas excluded by Article 52(2)).”

- 13 To my mind, the teaching of all these decisions is consistent in this respect: if the advance or contribution lies in excluded subject matter, the invention is not patentable.

Decision

- 14 In the absence of any indication to the contrary, and of any detail as to how the computer network operates when implementing the invention, I can only conclude that the hardware employed is conventional. Any advance must, it seems to me, reside in what the system has been programmed to do.
- 15 The applicant, via his Agent, John Leeming of JA Kemp & Co, has attempted valiantly to convince the examiner that the invention provides a technical solution to a technical problem and is therefore deserving of patent protection. Specifically, it was argued that reducing internet fraud and determining how much user information to request without offending the customer or losing the transaction were technical problems. Moreover it was argued that the invention provides a technical solution to this problem by introducing a transaction system which requests a minimum amount of information and combines it with historical information to score the transaction and determine whether further questioning will result in termination. It was also argued that the invention provides a technically improved calculating device combining “various machine elements”. Finally, the applicant asserted that the advance lay in the automatic calculation of the probability of abandonment and the automatic decision making based thereon.
- 16 I have considered all these arguments carefully but am not persuaded that the claims define a patentable invention.
- 17 The system operates to determine, based on the initial information supplied by a user, whether to go ahead with or terminate the transaction immediately, or to request

⁶ Fujitsu Ltd’s Application [1997] RPC 608

further information. If further information is required, the system conducts a cost benefit analysis for each of a set of potential questions to be put to a customer. In so doing, the system identifies the set that has the best chance of eliciting the information necessary to satisfy the retailer's security concerns without overburdening the customer such that they give up trying to make their purchase. Applying the first step in the *CFPH* test, I consider the advance to reside in the particular way the system determines the information to be requested from a potential customer when deciding whether to allow a transaction to go ahead.

- 18 Applying the second step of the test, I must determine whether that advance is new and not obvious under the description "an invention" in the sense of Article 52. In doing that I must have regard to the substance of the invention rather than the form of wording used to define it in the claims. The claims in the present case as exemplified in claim 1, define the invention in terms of the "technical" elements of a computer system. However, as the courts have made abundantly clear, the presence of conventional computing hardware elements in the claims do not make an invention patentable. The expression "maximising the probability of non-attributed fulfilment" as used in claim 1 might add an air of complexity and/or technicality to the claim but on closer inspection it is no more than selecting a preferred option based on a cost benefit analysis exercise. I am in no doubt that the advance I have identified is in an excluded field as being a scheme, rule or method for doing business. Given that conventional hardware is used for implementing that method, I can see nothing in the claimed invention that constitutes an advance under the description "an invention" in the sense of Article 52. The system does not provide a technically improved calculating device. It is a standard computer system implementing a new business scheme.
- 19 The examiner also reported that the invention is excluded as a program for a computer. Whilst various forms of claim have been adopted, I am in no doubt that they all rely upon a computer program for their implementation. But does that make them subject to the computer program exclusion?
- 20 In the *CFPH* judgment, Peter Prescott QC made it clear that not all programs for computers are excluded. To illustrate this point he introduced at paragraph 104 the concept of the "little man" test. According to that test, if the computer program is merely a tool for implementing the invention such that the invention would be patentable if carried out by someone (the little man) sitting at a console, then the invention is not a program for a computer as such and would be patentable.
- 21 Whilst that test might well be an appropriate one to apply in some circumstances, I have some reservations about applying it to the facts of the present case. It seems to me that the little man test is useful in assessing the function of a computer program in applications where an external artefact or industrial process is operated under computer control. We do not have that in this application. The present application is all about facilitating transactions over a computer network such as the internet. The computer is an intrinsic part of this invention. Consequently, to replace it with the "little man" is non-sensical and defeats the very purpose of the invention. I do though consider the Deputy Judge's comments towards the end of the little man test to be enlightening in the present context in one respect. In paragraph 104 of his judgment, the Deputy Judge said that if the artefact or process is new and not obvious even when the decisions are taken by the little man operating under the same rules, the invention

is about better rules for governing the artefact or industrial process (and hence would be patentable). At paragraph 105 however, he went on to say

“Of course, if it were about better rules for running a business, the idea would not be patentable.”

- 22 As I have already stated above, it is my view based upon all the information available to me that the present invention is about rules for running a business and hence is not patentable. That though does not answer the question is the invention also a program for a computer? The judgment in *CFPH* includes a good deal of discussion of the various exclusions contained in the EPC (and the Patents Act) and to the reasons underlying their existence. Given that *CFPH*'s applications were concerned with computer implemented business methods, it is not surprising that the computer program exclusion was included in that discussion. Indeed at paragraph 103 of his judgement in *CFPH*, the Deputy Judge said:

103. It was the policy of the computer program exclusion that computer programs as such could not be foreclosed to the public under patent law (copyright law is another matter). They would be foreclosed if it was possible to patent a computer when running under the instructions of the program, for example, or magnetic disk when storing the program.”

- 23 I take that to be entirely consistent with the long established principle of UK patent law that in deciding whether an invention is patentable, it is the substance of the invention that is important, not the form of wording used in the claims. As I have said earlier, the claims presently on file include independent claims drafted in a variety of forms. However, I am in no doubt that the substance of the invention defined in all the claims is a program for a computer. Were I to allow the application to proceed to grant, then that would foreclose computer programs to the public. In accordance with the *CFPH* judgment, the computer program exclusion exists to prevent that and that leads me to conclude that the present invention is also excluded as a program for a computer.

Other matters

- 24 For completeness I feel I need to make reference to one other strand of argument put forward in the correspondence on this case, namely that by not granting patents for subject matter such as this, the UK is not fulfilling its obligations under the TRIPS agreement. The effect of the TRIPS agreement on what is and is not patentable has been addressed by the Comptroller's Hearing officers on numerous occasions⁷ and I see no reason to come to a different conclusion in the present circumstances. The TRIPS agreement has no direct effect and thus did not override any existing law when it became effective on 1 January 1996. No amendments to the exclusions in section 1 of the Act or Article 52 of the EPC have been deemed necessary following its coming into effect. Thus inventions comprising methods of doing business remain unpatentable in the UK, including when implemented via a computer.

Conclusion

⁷ See the decision in Franks' application BL O/024/05 for example

25 I have decided that any advance or contribution which the inventor has made is in an excluded area. It is not new and non obvious (and susceptible of industrial application) under the description “an invention” in the sense of Article 52 and is therefore not patentable. I have read the specification in its entirety and cannot identify anything that could form the basis of a patentable invention. I therefore refuse the application under section 18 as failing to meet the patentability requirements of section 1.

Appeal

26 Under the Practice Direction to Part 52 of the Civil Procedure Rules, any appeal must be lodged within 28 days of receipt of this decision.

A BARTLETT

Deputy Director acting for the Comptroller