

BL O/195/04

7th July 2004

PATENTS ACT 1977

APPLICANT

Neal Solomon

ISSUEWhether patent application number GB
0406042.2 complies with Section 1(2)(c)

HEARING OFFICER A C Howard

DECISION

Introduction

1 This is one of several divisional applications treated as having been filed on 1 November 2000. All the members of the family started out as an application under the PCT, which was published as WO 01/33464 A1 on 10 May 2001, entered the national phase in the UK as GB 0206689.2, and was subsequently granted as GB 2369705 B on 23 June 2004. The divisional application which is the subject of this decision was lodged on 17 March 2004 and published as GB 2395328 A on 19 May 2004.

The application

- 2 A common thread running through all members of the patent family is a system for procurement that operates over a computer network in which purchasers place requests to receive bids to sell an item from vendors. This is similar to a 'reverse auction' where buyers invite offers of sale from sellers.
- 3 The invention of this application incorporates features allowing the customer to be accurately matched with a vendor who sells a product that meets a detailed set of customer-defined attributes. The customer-defined attributes are compared against a database of products which have vendor-defined features: a match between customer-defined attributes and vendor-defined features indicates that a vendor is selling a product that meets a customer's requirements. The vendors regularly update the database with details of the products that they stock. The latest claims on file also incorporate the feature that data about a customer's purchasing history is collected and used to make suggestions about products that may be of interest to the customer.
- 4 The computer system of the invention consists of standard computers linked by a network such as the Internet. The various functions of the invention are controlled by

software running on the computers.

5 There are currently two independent claims in the application. They read:

1. A method for procurement using a computer that communicates over a network, the method comprising:

receiving from a purchaser a request to receive bids to sell an item selected from a collection, said request including a set of customer-defined attributes particular to said selected item;

processing a comparison of a plurality of sets of vendor-defined features against said customer-defined attributes for responsiveness to said request, each said set of said vendor-defined features maintained for one of said plurality of vendors in a vendor database of said computer, said vendor database comprising a plurality of sets of vendor-defined features, each said set associated with one of said plurality of vendors; sending a bid to sell said selected item to said purchaser from each of a plurality of vendors if said vendor-defined features are responsive to said customer-defined attributes;

receiving from each of said plurality of vendors an updated set of vendor-defined features for updating said associated set of vendor-defined features;

accumulating data regarding said purchaser's purchasing history to form a consumer profile for said purchaser; and

providing procurement suggestions to said purchaser, said procurement suggestions include predictions of product or service items said purchaser may wish to procure based on said purchasing history."

119. A system for procurement that communicates over a network, the system comprising:

a memory for maintaining a list of individual items;

a vendor database comprising a plurality of sets of vendor-defined features, each said set maintained for and associated with one of said plurality of vendors; one or more network interfaces adapted to send and receive data to and from customer nodes and vendor nodes; and

one or more processors in communication with the memory,

wherein, when the one or more network interfaces receive a request from a customer node to receive bids to sell an item selected from the list, said request including a set of customer-defined attributes particular to said selected item, the one or more processors process a comparison of said plurality of sets of vendor-defined features against said customer-defined attributes for responsiveness to said request;

wherein, when the vendor-defined features from at least two of said plurality of vendors are responsive to said customer-defined attributes, the one or more processors sends bids to sell said selected item to said purchaser; and

wherein the system is arranged to update said associated set of vendor-defined features in said vendor database on receiving an updated set of vendor-defined features from each of said plurality of vendors;

wherein the system is further arranged to accumulate data regarding said purchaser's purchasing history to form a consumer profile for said purchaser and to provide procurement suggestions to said purchaser, said procurement suggestions include predictions of product or service items said purchaser may wish to procure based on said purchasing history.

6 There are a number of subordinate claims which relate to further features of the method and system of the main claims.

Objections raised by the examiner in relation to Section 1(2)

- 7 This application is, as noted above, a divisional application. The claims as they currently stand can trace their origins to an amalgamation of claims present in the parent application as filed, and were effectively first considered by the examiner in the context of a set of amended claims filed on that application on 16 December 2003 and reported on in the examination report dated 14 January 2004.
- 8 An objection to excluded matter having thus already been raised, the agent submitted, at the time of filing of this divisional application, a letter explaining why in his opinion the application was suitable for grant. The reason given was that the central vendor database of the invention provided a technical advance because it allowed customers to procure products even if one or more vendors were unavailable due to e.g. computer problems.
- 9 In his examination report of 1 April 2004, the examiner raised an objection that the application related to a method for doing business and/or a program for a computer and was excluded from patentability by virtue of Section 1(2)(c). He also commented that the system was composed of standard hardware elements, and that the characterizing feature of the system was its use in the business related field of procurement, involving no technical contribution to the art. In support of his contentions, he drew the applicant's attention to the Office's Practice Notice of 24 April 2002, in which it was confirmed that following Fujitsu's Application [1997] RPC 608, an invention would not be excluded by virtue of Section 1(2) if a technical contribution could be identified. He also objected that the use of a central database was not a technical advance, since the database itself was standard. A natural consequence of centralizing the information is that it is no longer dependent on the separate vendors' systems, and so using a central database does not provide any fundamental technical contribution: any advance in the system which allows it to operate when the vendors' systems are not functioning is just a consequence of the different underlying business method, which has chosen to take the vendors out of the initial selling process.
- 10 In response to this examination report, the agent visited the Office on 4 May 2004 for an interview. According to the examiner's report of that meeting as it appears on the file,

"Mr Derry [the agent] asserted that the invention does involve a technical contribution because it involves multiple vendors cooperating with a central computer system. The computer system holds a vendor database that contains details of items offered for sale by the vendors. When a purchaser requests bids to sell an item having certain purchaser specified features, the system checks the purchaser specified features against the items in the database for a match. If there is a match, an offer to sell an item is sent to the purchaser. The technical contribution in this was said to be the ability of the system to continue operating even if the vendors' computer systems are not operational. This is a function of

the database being held on the central computer system. Mr Derry drew analogy with a mobile phone system where an area is covered by several base stations; if one base station fails then calls are routed to another. Another analogy may be a computer where the CPU may assume some functions of e.g. the graphics card if that component fails."

- 11 The examiner was not convinced by this argument. He was of the opinion that maintaining a vendor database with a third party was common practice. He cited an example of this involving a shop that sells specialised equipment and which holds catalogues from manufacturers. In response to a customer enquiry, the shop may match up items from the various catalogues and offer them for sale to the customer. The examiner contended that the present invention appeared to be an automation of this idea, and there was no technical contribution in this.
- 12 Following the interview, in a letter dated 10 May 2004, the agent filed further observations and a set of amended claims. These comprised amendments to the method claim 1 and independent system claim 119 incorporating from hitherto subordinate claims the feature of accumulating data regarding purchasing histories to form consumer profiles and providing procurement suggestions on the basis of such histories. He advanced the argument that, while the case law has shown that the computer implementation of a known business method on a computer is excluded matter, the computer implementation of a new business method was not similarly excluded. The agent further argued that the system proposed was inventive, and that technical means in the form of a database were used to implement the invention.
- 13 The examiner did not consider the above response to overcome the objection to patentability, and telephoned Mr Derry on 17 May 2004 to discuss the matter further. He again put forward the view that the invention consisted merely of conventional hardware, under the control of software; that there is no technical contribution in the hardware; and that the software used does not solve any technical problem within the hardware or cause the hardware to operate in a technically different way.
- 14 In the agent's letter dated 20 May 2004, it was again contended that the underlying concept of the invention was new and so the application could not be excluded from patentability as a computer implementation of a known business method. To quote:

"In this case, the technical contribution is provided through the technical means in the claims which allow the vendor to submit bids and thus make sales even if the vendor system suffered a technical failure or if there is a communications failure between the vendor and the computer. This contribution necessarily arises as a consequence of the arrangement of the components and functionality within the system. This is a technical contribution".

- 15 In the event that the examiner was unable to agree with this submission, the agent requested a hearing, which was duly offered in the course of a telephone call as recorded by a written note on the file note 26 May 2004.
- 16 A hearing was accordingly appointed for 7 June 2004 but shortly beforehand, the agent informed the office that his client no longer wished him to attend. I shall therefore

proceed to decide the matter on the basis of the papers on file.

The law

17 The examiner has maintained that the application is excluded from patentability under Section 1(2) of the act, in particular as a method for doing business or as a computer program under Section 1(2)(c). 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 purposes of this Act only to the extent that a patent or application for a patent relates to that thing as such."

- 18 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, to which they correspond. The decisions of the EPO Boards of Appeal that relate to this Article are therefore also pertinent.
- 19 The principles to be applied when considering inventions relating to an excluded field are set out in *Fujitsu Limited's Application* [1997] RPC 608 wherein at page 614 Aldous LJ said:

"...it is and always has been a principle of patent law that mere discoveries or ideas are not patentable, but those discoveries and ideas which have a technical aspect or make a technical contribution are. Thus the concept that what is needed to make an excluded thing patentable is a technical contribution is not surprising. That was the basis for the decision of the Board in *Vicom*¹. It has been accepted by this Court and the EPO and has been applied since 1987. It is a concept at the heart of patent law."

20 In other words, inventions relating to an excluded field which involve a technical contribution will not be considered to related to the excluded matter as such. The practice of the Patent Office in this regard is set out in the practice notice issued on 24 April 2002 and entitled "Patents Act 1977: interpreting section 1(2)".

¹ Vicom/Computer-related invention [1987] 1 OJEPO 14 (T208/84)

21 In assessing any alleged technical contribution, it is the substance of the claim rather than its particular form that is important. Accordingly, it is not possible to render an inherently unpatentable method patentable merely through the specification of technical means.

Discussion

- 22 Claim 1 in its latest form relates to a "method for procurement using a computer that communicates over a network" and incorporates a number of steps including receiving a request for bids to sell an item, comparing stored vendor-defined features against customer-defined attributes, sending out bids to sell, receiving updated information from vendors, building consumer profiles and providing procurement suggestions. All these steps, if carried out independently of a computer, would amount to business transactions and associated procedures, and I am therefore satisfied that the claim relates to the computer-implementation of a business method.
- 23 What I need to do therefore is to consider whether the claimed invention, taken as a whole, makes a "technical contribution". If the answer to this question is "yes", then I have to conclude that the invention does not relate to excluded matter "as such". This is a separate question to that of the possible presence of novelty and inventive step.
- I should here refer to the submission made in the agent's letter dated 20 May 2004 that the invention of the independent claims cannot be precluded from patentability on the grounds of being a mere computer-implementation of known business method, since the underlying business method (as specified in the latest set of claims on file) is new and not obvious. As far as it goes, this must be correct. However this is not the same as saying that no computer-implementation of an underlying business method which is new and not obvious can be precluded from patentability. There is no doubt that an "invention" may be new and not obvious, yet still excluded from patentability under s. 1(2). The correct test to be applied, following the authorities cited above, is whether the invention, considered as a whole, makes a technical contribution.
- 25 The agent argues that a technical contribution is provided through the means which allow the vendor to submit bids and thus make sales even if there was some kind of technical failure in part of the system. This is achieved in particular through the provision of a central database. I believe that in making this submission a parallel is being drawn with the EPO Board of Appeal decision of *Vicom/Computer-related invention* [1987] 1 OJEPO 14 (T208/84) in which a technical advance was identified in the form of an increase in processing speed. This case is referred to in the judgment of the Court of Appeal in *Fujitsu* (see above).
- 26 However *Vicom* was settled on the basis that the process involved was itself a technical one (the processing of images). In cases where it is decided on the facts that the field of the invention is non-technical, the existence of a seemingly "technical" advantage, such as for example in this case, an improvement in the resilience of the system, is not in itself conclusive of the presence of a technical contribution. Any computer program or system implemented on a computer will have consequences for the way the system

operates, and these will vary from situation to situation. The mere fact that the implementation of one (unpatentable) method turns out to be better than another does not in itself impart a technical contribution. Something more than this is needed.

- 27 In the present case, the provision of the database is a feature of the implementation of the underlying business method on conventional hardware. The purported advantage (namely that the system can continue to provide some functionality in the event of a failure of communications with the vendor) would also be provided in the case where the underlying method were to be carried out without the aid of a computer. This point was made by the examiner in the course of the interview on 4 May 2000 where the example of a catalogue held by a camera shop was cited. According to this example, the catalogue is the "database" of vendor-defined features and the shop can match these to customer attributes and process orders even in the absence of direct communications with the vendor.
- In his letter dated 10 May 2004, the agent responded on this point by amendment to render the underlying method novel over the cited prior art, and developed an argument to the effect that a patent cannot be refused on the grounds that it is a mere computer implementation of a method which is itself an obvious extension of a known method. Another way of putting this would be to say that while the computer-implementation of a known method might lack technical contribution, there is no authority for the conclusion that the computer-implementation of a novel but obvious method similarly lacks technical contribution.
- 29 This argument is however based on the flawed reasoning that it is decisive to the question of technical contribution whether or not the underlying method is novel. As I have said above novelty and inventive step are separate issues, and the correct approach under Section 1(2) is to take the claimed matter as a whole and consider whether a technical contribution is present.
- 30 In this case, the amendment made comprised the incorporation of the additional steps of accumulating customer-related data and making suggestions based thereon. The agent suggested that these steps are technical, but I disagree. The steps involved are clearly elements of a business method and the use of technical means to achieve them does not alter this fact. Thus the overall claim remains inherently a computerimplementation of a business method.
- 31 Considering claim 1 in the light of the above, I can find nothing which might lead me to conclude that a technical contribution has been made. In particular there is nothing to suggest that there have been any particular technical considerations involved or technical problems solved in the realisation of the invention as claimed. I therefore conclude that no technical contribution is present and claim 1 is therefore excluded from patentability under Section 1(2)(c).
- 32 The above discussion has been in respect of the method of claim 1. Claim 119 is framed as an independent claim, but in essence relates to a system comprising conventional components configured to perform the method of claim 1.
- 33 It is well established that it is not possible to render patentable an inherently

unpatentable method merely through the specification of technical means, and indeed no attempt has been made to argue in these proceedings that this claim should be allowed irrespective of whether claim 1 may be found to include a technical contribution. Following the same reasoning as above, I accordingly find that claim 119 is also excluded from patentability under Section 1(2)(c).

Possible amendments

- 34 As remarked above, the application includes a large number of subordinate claims relating to further details of the method and system. I am mindful that no submissions have been made in respect of these, and also that the parent application has itself been granted. I therefore cannot exclude the possibility that there is some matter in the present application which might support a patentable claim.
- 35 In circumstances such as this, it is normal for the applicant to be given an opportunity to file amendments with a view to putting the application in a state where it could proceed to grant, and I see no reason for departing from this practice in the present case.
- 36 There is however an issue over timing: the normal period for putting the application in order for grant expired on 17 June 2004, and in the light of my decision on the allowability of the claims, in the absence of any other action, the application would normally be treated under s. 20(1) as having been refused on that date.
- 37 If the applicant wishes to avail himself of the opportunity to file amendments, it will therefore be necessary to apply under Rule 110(3) for a retrospective extension of the normal Rule 34 period. If this is done by 17 July, an extension of one month will be granted as of right, and it will then be possible to benefit from the provisions of Section 20(2) which provide for an automatic extension until the end of the period for appeal against this decision.

Conclusion and next steps

- 38 I have found that the invention as claimed in the main claims of this application fails to provide any technical contribution and that it is therefore excluded from patentability under Section 1(2) of the Act.
- 39 If the applicant wishes to submit amendments in an attempt to rectify this, he should follow the steps outlined above, in which case he will have until the end of the appeal period to put the application in order. If acceptable amendments are not filed, I shall refuse the application.

Appeal

40 Under the Practice Direction to Part 52 of the Civil Procedure Rules, any appeal must

be lodged within 28 days.

A C HOWARD Deputy Director acting for the Comptroller