BL O/193/04

6th July 2004

PATENTS ACT 1977

APPLICANT Alan J Venner et al

ISSUE Whether patent application number GB 0100088.4 is excluded from being patentable under section 1(2)

HEARING OFFICER A Bartlett

DECISION

Introduction

1 Patent application No GB 0100088.4 entitled "A reminder and actioning system" was filed on 3 January 2001 in the names of various partners of Venner, Shipley & Co, a firm of Patent Agents and claiming priority from European Application EP00300055 filed on 6 January 2000. The application was published on 13 February 2002 as GB 2365174 following the issue of a combined search and examination report on 26 November 2001.

2 The correspondence between the applicants and the examiner has been extensive but for the purposes of this decision I need only provide a summary of it. In the first examination report, the examiner objected that the claims were not novel over some documents listed in the search report, that the claims were unclear and that there was potential conflict with a corresponding European application (EP1115076). He also objected that the invention appeared to be excluded under section 1(2) as a method for doing business. In subsequent reports the examiner maintained his objection that the invention was excluded as a method for doing business but supplemented this by objecting that it was also excluded as a program for a computer and as a mental act. In so doing the examiner identified a number of internet publications as being the nearest prior art to the present invention.

3 For their part, the applicants have maintained throughout that the invention was not excluded under section 1(2) of the Act. The Office's approach to handling this application was the subject of a preliminary hearing before me on 16 December 2003 and a subsequent decision issued on 15 April 2004 in which I found that the applicants knew the case they had to answer on the issue of whether the invention was excluded from being patentable under section 1(2). Thanks to the diligence of the applicants, all the other issues were resolved in advance of the substantive hearing held on 25 May 2004 which was therefore able to focus on the single issue of the patentability of the invention. At the hearing the

applicants were represented by Mr Stuart Geary , Mr Matthew Read, Mr Paul Derry and Mr Philip Baker, all of Venner, Shipley & Co, Mr Geary also being the inventor.

Background

4 The application concerns an automated system for reminding clients of tasks requiring action.

5 The system comprises a record such as a database containing information relating to the approach of task due dates for a number of separate clients and a server for receiving task performance instructions. In the specific embodiment disclosed, the task due dates are patent renewal dates thought the independent claims are not limited to that specific use. A messaging process is run at regular intervals eg once per month such that an electronic message is sent to a client if (and only if) a due date for that client falls within a set period from the time the messaging process is run. No message is sent to a client if no due date falls within the specified period for that client. Moreover, and this is crucial to the invention, if more than one due date falls in the period for a client, (s)he still only receives one electronic message. That electronic message contains a hypertext link (or other means not requiring user input of a locator) to allow the client to request a page from the server through which they can input instructions to perform each of the tasks that are due.

6 Thus, according to the embodiment, clients with extensive patent portfolios are not bombarded with emails informing them that they have actions to carry out.

7 The claims in their latest form (as filed on 18 May 2004) comprise independent method and apparatus claims(claims 1 and 7 respectively), dependent claims 2-6 and 8-10 and omnibus claims 11 and 12.

8 At the hearing, attention was focused on the independent claims which read as follows:

1. A method comprising:

maintaining a record of information for determining the approach of task due dates for a plurality of client entities;

maintaining hypermedia server means for receiving task performance instruction;

performing a messaging process at a first predetermined time which is independent of said due dates;

performing the messaging process again at a second later predetermined time which is independent of said due dates; and

receiving an instruction to perform a task from a client entity by means of the hypermedia server means,

wherein:

said messaging process comprises sending one electronic message only to each client entity for whom the number of task due dates falling within a succeeding predetermined period is greater than 0 and sending no electronic messages to each client entity for whom the number of task due dates falling within said succeeding predetermined period is 0,

at least one of said electronic message relates to a plurality of task due dates,

said electronic messages include means for enabling a client entity to request a page from the hypermedia server means without user input of a locator therefor.

7. An apparatus for administering a repetitive task, the apparatus comprising:

hypermedia server means for receiving task performance instruction; and data processing means configured for maintaining a record of information for determining the approach of task due dates for a plurality of client entities and performing a messaging process, at a plurality of times independent of the due dates,

wherein

said messaging process comprises sending one electronic message only to each client entity for whom the number of task due dates falling within a succeeding predetermined period is greater than 0 and sending no electronic messages to each client entity for whom the number of task due dates falling within said succeeding predetermined period is 0,

at least one of said electronic message relates to a plurality of task due dates,

said electronic messages include means for enabling a client entity to request a page from the hypermedia server means without user input of a locator therefor.

9 I was also addressed explicitly in relation to claim 2 which reads as follows:

2. A method according to claim 1 wherein the electronic messages do not identify the task due dates to which they relate.

The law

10 The examiner has maintained 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:

> A1(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.@

11 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. I must therefore also have regard to the decisions of the European Boards

of Appeal that have been issued under this Article in deciding whether the present invention is patentable.

Interpretation

12 According to both section 1(2) of the Patents Act and Article 52 (3) of the EPC, an invention is only excluded to the extent that a patent or application for a patent relates to that thing *as such*. The Patent Office Practice Notice issued on 24 April 2002 entitled APatents Act 1977: interpreting Section 1(2)@ provides what I consider to be a convenient summary of the approach to be adopted in determining whether an invention constitutes an excluded item *as such*. I would summarize the practice notice as saying that even if an invention relates to an excluded field, it will not be refused as being unpatentable if it provides a technical contribution. In other words, if it makes a technical contribution is does not relate to the excluded item A*as such*@. Mr Geary accepted that interpretation of the statue. Indeed much of the argument Mr Geary put forward was directed towards persuading me that the present invention provided the required technical contribution.

13 Furthermore, the Practice Notice also makes it clear that the technical contribution doctrine will be applied uniformly across all the excluded categories. Mr Geary also accepted this.

14 I accepted Mr Geary and his colleagues' arguments that an invention was not unpatentable just because it included excluded elements.

15 Mr Geary argued that any doubt as to the patentability of the invention should be resolved in favour of the applicant. I agree that the same burden of proof applies when assessing excluded subject matter as to other pre-grant issues. Indeed in so doing I am mindful of the decision in *Fujitsu Limited's Application* [1996] RPC 511[1] where, in dismissing the appeal against the Hearing Officer's decision to refuse that application, Laddie J said at page 533 line 3:

> "Therefore the onus lies on the person contesting patentability to prove that the alleged invention falls foul of the statutory exclusions. Furthermore, at the patent office stage, the benefit of the doubt should be given to the applicant."

16 At the hearing there was a certain amount of discussion as to the merits of the way the Boards of Appeal of the EPO have assessed patentability in some of its decisions, namely *COMVIK* (T0641/00) and *Pension Benefits System Partnership* (T931/95). In particular, the applicants put it to me that the hurdle set by the EPO in deciding whether an invention was excluded was lower than that adopted in the UK. I am not sure that I agree with that. I certainly do not feel empowered to assess the present invention in the way the Board of Appeal did in those cases.

17 The approach taken by the Board of Appeal in *Pension Benefits* comprised answering two questions which I will summarise as:

> does the invention have technical character? and

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does the invention make a technical contribution such that it involves an inventive step over the prior art?

18 In answering the first question, the Board of Appeal drew a distinction between the method claims (which it deemed to be excluded as a method of doing business) and claims to the apparatus for implementing that method (which it deemed to have technical character and therefore not to be excluded). However, when it came to answer the second question, the board concluded that only non-excluded features could contribute to the inventive step. In that particular case the board concluded that any distinctiveness the apparatus claims possessed over the prior art resided in the excluded subject matter and thus could not contribute to the inventive step. Consequently the Board refused the apparatus claims as lacking the necessary inventive step.

19 Such an approach is contrary to UK law in two respects. Firstly it is well established in the UK courts that in determining whether an invention is patentable it is the substance of an invention that is important, not the form of claim adopted. Accordingly, it is not possible to render patentable an inherently unpatentable method merely through the specification of technical means. Thus, when the Court of Appeal came to consider *Merrill Lynch's Application* [1989] RPC 561, Fox LJ said at page 569:

> "..... 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. Something further is necessary. The nature of that addition is, I think, to be found in the *Vicom* case where it is stated: "Decisive is what technical contribution the invention makes to the known art". There must, I think, be some technical advance on the prior art in the form of a new result (eg, a substantial increase in processing speed as in *Vicom*)."

20 To my mind that is a clear statement that in UK law, substance prevails over form.

21 Secondly, the Court of Appeal[2] has made it abundantly that in UK law it is not appropriate to divide the claim into excluded and non-excluded parts and to only look to the non-excluded part as contributing to the inventive step.

22 Thus the approach adopted by the Board of Appeal in *Pensions Benefits* is not consistent with established UK legal principles. This inconsistency has been expressly considered by the Comptroller's hearing officers on a number of occasions, notably in *Hutchin's application* and *Pintos Global Services Ltd.'s application*[3]. On both those occasions the hearing officer recognized the desirability of consistency between the UK Patent Office and the EPO in this area but concluded that where there was a divergence, he was bound to follow the approach taken by the UK courts. I see no reason to come to a different conclusion in the present case.

23 I therefore conclude that in assessing whether an invention is patentable, I must consider the

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2 in Genetech Inc's patent [1989] RPC147 and Merrill Lynch's application [1989] RPC 561

3 Hutchin's application (BL O/209/01) and Pintos Global Services Ltd.'s application (BL O/171/01)

substance of the invention not the form of claim chosen by the applicant and decide whether it makes a technical contribution such that even if it relates to potentially excluded subject matter, it does not amount to excluded matter as such.

24 Whilst I am not constrained to follow any particular approach to assessing patentability I consider it appropriate to address the following two questions in assessing whether the present invention is excluded from being patentable:

> Does the invention fall within the area of excluded subject matter mentioned in Section 1(2) of the Act? If the answer is "yes";
>
> Does the invention make a technical contribution such that it cannot be said to amount to excluded matter as such?

25 Only if the answer to the second question is "no" is the invention not patentable under Section 1(2).

Does the invention fall within the excluded categories?

26 Mr Geary's view of how narrowly the exclusions should be construed was not altogether clear or consistent during the hearing. On the one hand he said the exclusions did not provide strict pigeon holes into which an invention had to fall if it was to relate to an excluded item. Rather he said they helped define an area of subject matter for which patent protection was not deemed to be appropriate. He even suggested that the way to deal with the issue was to ask the question: "Is this the sort of thing that was intended ultimately in the EPC to be excluded from patentability". At other times however, Mr Geary appeared to take precisely the opposite view in vigorously arguing that the invention could not be excluded as a program for a computer (since in his opinion at least parts of it could be implemented other than using a computer) nor as a method for doing business (since the claims were not limited to business activities).

27 I shall come back to the first of these views later but I think it makes more sense for me to consider whether the invention is potentially caught by any of the specific exclusions first.

Method for doing business

28 Mr Geary accepted that the invention provided a tool that could be used in a business context. That was not though, he said, the same as saying it related to a method for doing business. Although the preferred (and only) embodiment disclosed was a renewal reminder system, he said the claims were not limited to such a use. Indeed, he said, the claims embraced other sorts of activities such as informing a user of the approach of birthdays of members of their family. Such activities were not in Mr Geary's opinion business activities and thus the claims could not he said be excluded as a method for doing business.

29 I do not agree. At the hearing I referred Mr Geary to paragraphs 1.21-1.25 of the Manual of Patent Practice and paragraph 1.14 of the CIPA Guide, both of which include discussion of a number of cases that have been refused under the business method exclusion. These include *Melia's application* (BL O/153/92) in which a prisoner could reduce his prison

sentence in exchange for receiving some corporal punishment and *Will's application* (BL O/89/99) in which a system of cards was used to provide immediate information on a child should (s)he go missing. Thus the business method exclusion has not been taken to be restricted to strictly financial activities involving the transfer of money. Rather it has also been taken to embrace organizational and managerial activities. The claimed invention relates to a system for monitoring and informing clients of the approach of task due dates. Thus, to my mind, the activities being carried out in the present invention are administrative and are just the sort of activities which have traditionally been viewed as falling within the business method exclusion. Thus I find the present invention to potentially fall within the business method exclusion.

A program for a computer

30 Mr Geary accepted that the preferred method of implementing the invention was via a computer. However he was at pains to stress that that was not the only way in which it could be implemented. To use his words: "Of course you do it with a computer as a practical matter these days. But it is not inevitable that it must be implemented by a computer." On that basis he said the invention could not be excluded as a program for a computer.

31 I have to say that this particular line of argument has caused me a good deal of difficulty. Looking at the independent apparatus claim (claim 7), the invention comprises "hypermedia server means" and "data processing means" for storing information on approaching due dates and for performing the messaging process. The electronic message sent to a client includes "means for enabling a client to request a page from the hypermedia server means without user input of a locator for" which as far as I can tell means a hypertext link. Likewise, method claim 1 is reliant on the same hardware for implementing the invention. I find it difficult to envisage this being carried out other than via computer equipment.

32 In arguing at the hearing that the invention could not be excluded as a program for a computer, Mr Geary outlined a number of scenarios which he said demonstrated that the invention did not have to be wholly implemented using a computer. He said that the means for storing the information did not have to be a computer database – it could be a punched paper tape through which a light was shone. Mr Geary sought to distinguish the function of the tape in his scenario from that of early computer programs which often consisted of similar punched tapes. In particular he said that the tape in his scenario merely contained the data to be acted on by the hardware; it was not a program.

33 Moreover, Mr Geary continued this line of argument by outlining a scenario where the timing data derived from the tape was acted upon by a Field Programmable Gate Array (FPGA) or a TCP/IP stack which then controlled the electronic messages sent out. These, he said, were not computers and consequently the invention could not fall within the computer program exception. I am simply unable to accept any of this.

34 In *Gale's Application* [1991] RPC 305 Aldous J made it clear that the first step in assessing patentability is to properly construe the claim when he said at page 315:

> "..... I conclude that the first task of the court is to construe the claim, as that is where the invention is defined. If the claim properly construed is drafted so as to relate to any of the matters disqualified by section 1(2) then the invention is not patentable."

35 At the hearing I sought to refer to the description to assist me in the process of construing the claims. Mr Geary argued that I could not do that. His reason for taking that line is obvious – there is only one embodiment described and that of course is one where the entire invention is implemented using a computer system. Mr Geary argued that according to section 125, the only reason to look to the description when interpreting a claim is when the claim is inherently unclear. Since the claims in the present application were in fact clear, he said, there was no reason why I should refer to the description in interpreting them.

36 I have now had an opportunity to have a closer look at section 125 of the Act and I think Mr Geary is wrong on that point. Section 125(1) reads as follows:

> 125.–(1) For the purposes of this Act an invention for a patent for which an application has been made or for which a patent has been granted shall, unless the context otherwise requires, be taken to be that specified in a claim of the specification of the application or patent, as the case may be, as interpreted by the description and any drawings contained in that specification, and the extent of the protection conferred by a patent or application for a patent shall be determined accordingly.

37 Thus the section places no limitation on the circumstances in which the description can be consulted when interpreting the claims. In fact, I would say it goes further than that. It says that the description shall be read when interpreting the claims. That is certainly the interpretation afforded by the Manual of Patent Practice which says, at paragraph 125.03:

> "In light of section 125(1) the claims should not be read in isolation"

38 Furthermore, paragraph 125.02 provides guidance on what to do in the situation where even though the claims when read in isolation are perfectly clear, the description includes something which casts doubt upon the true scope of the invention. That clearly envisages using the description to interpret an otherwise clear claim.

39 Thus, contrary to Mr Geary's view, I am actually obliged not to treat the claims in isolation when interpreting them. In the present case, the description provides nothing to help me come to a conclusion other than that the invention is computer implemented.

40 However, even if I could not look to the description in this case, I would not come to a different conclusion. I am simply not persuaded by Mr Geary's argument that the claimed invention is not limited to computer implementation. In my view, the punched paper tape Mr Geary described is a computer program or at least provides the raw data upon which the program operates. It is entirely standard for a program to require such a data source and its inclusion in the claim does not change my view that the claimed invention is in susbstance a program for a computer.

41 Whilst the FPGA and TCP/IP network components Mr Geary described might look very different to the sort of computer available from your local PC superstore, I still consider

them to be computers or to form part of a computer network in the system he described. It is my considered view that in substance these are simply hardwired or hardware alternatives to a more conventional computer system and that does not alter the essential nature of the invention which is of course what I have to consider. Whilst I did not rely upon it at the hearing, in reaching that conclusion I am reassured that a similar approach was adopted by the EPO Technical Board of Appeal which said in IBM/Document abstracting and retrieving [1990] 1-2 OJEPO 12 (T22/85):

> "The foregoing conclusions have been made mainly on the basis that the claimed systems and methods would involve a conventional computer controlled by a software program ….Analogous considerations however apply in the case where the control of the computer would be effected by hardware…., an option also falling within the scope of the claims, as the choice between the two possibilities is not of an essential nature but is based on technical and economic considerations which bear no relationship to the inventive concept as such."

42 Moreover, the preamble to the claim refused in *Gale's application* reads as follows:

> "Electronic circuitry in the form known as 'ROM', to provide controlling means whereby four binary manipulative entities, of the type known as 'registers' shall derive he square root of an arbitrary number…".

Thus, despite the invention being defined in terms of electronic circuitry that seems to amount to a hardwired calculator rather than a computer, the court had no difficulty deciding that the invention was excluded as a program for a computer.

43 No matter how objective or open minded I try to be, I am unable to envisage the present invention as being, in substance, anything other than a computer implemented invention. I therefore find the invention to potentially fall within the computer program exclusion.

The general area of excluded matter

44 Even if I am wrong in deciding that the invention is caught explicitly by the business method and computer program exclusions, I still consider the activities conducted in performing the invention to fall within the area excluded from patentability by section 1(2).

45 To require an invention to fall strictly into one of the listed exclusions would, in my view, be to ignore the words "among other things" in that section of the Act and I am not willing to do that. Secondly, the courts have not found it necessary to decide which of the exclusions an invention falls within when deciding whether it related to excluded subject matter. For example in *Lux Traffic Controls Limited vs Pike Signals Limited* [1993] RPC 107, the court was asked to consider whether a method of controlling traffic lights was a patentable invention. At page 138 line 35 of his decision, Aldous J said:

> "…the Act comprises a non-exhaustive catalogue of matters or things which are not patentable. Although not specifically mentioned, I believe a method of controlling traffic as such is not patentable, whether or not it can be said to be a scheme for doing business."

46 Thus I do not consider myself bound to find that an invention falls strictly within any one of the excluded categories for it to be unpatentable. In my opinion, the invention is concerned with carrying out administrative tasks using computer or computer-like hardware. Consequently even if it does not fall precisely within the terms of the specific exclusions in section 1(2) of the Act, I consider it to relate to subject matter of the sort that is excluded in the Act. Consequently I consider that I need to go on to address the second stage of the test I have adopted, namely whether the invention makes a technical contribution.

Technical Contribution

47 At the hearing, Mr Geary and his colleagues were commendably diligent in their efforts to demonstrate how the invention made a technical contribution. In doing so, they pursued a host of lines of argument, all of which I shall address in turn. For convenience I shall deal with those arguments in two groups:

The problem the invention seeks to overcome and

How that problem is solved and the effects achieved in solving it.

48 In dealing with the potential sources of technical contribution in this way though, I accept a technical contribution can arise from any one of these areas.

The problem sought to be overcome by the invention

49 At the hearing, Mr Geary, in his role as inventor, gave some helpful insight into the genesis of the invention. He said that dealing with occasionally forgetful and disorganized clients had led him to seek to develop a system where there was less chance of key actions such as payment of renewals being missed. This, he said, lead him to conclude that an electronic system might provide a more reliable renewal actioning system. However, he said, there was more to his invention than the mere automation of what had previously been done manually.

50 He said that in Venner Shipley's paper-based renewals service, actions were initiated on a case-by-case basis. Thus individual letters were sent to a client for each action that fell due at some specified time prior to the action being due. Thus, a client whose portfolio included a family of say 15 related patents might receive 15 separate letters on a particular day informing him that a particular action was due. Mr Geary felt that merely automating that process so that 15 emails were sent rather than 15 letters was a sub-optimal solution. He said that whilst this was cheaper and faster than sending 15 letters in the post, there was a risk that the recipient would be disinclined to action them appropriately, perhaps considering them to be akin to junk mail. Mr Geary's solution to this problem was, he said, to develop a system where the psychological barrier to replying was reduced. This he said was achieved in his system by arranging for the information to be stored and actioned on a time (rather than event) driven basis. Thus the client would receive a single email at regular intervals (on an email day), a messaging regime which would encourage the client to act. He said that by doing this the invention avoided overloading the client whilst maintaining an appropriate "nag factor" so as to maximize the likelihood of receiving a response. In Mr Geary's opinion, this constituted a technical problem and in providing a solution to that

problem, he considered the invention was patentable.

51 The problems Mr Geary identified as being solved by the invention are slightly different from those mentioned in the specification as originally filed. Indeed, at the hearing there was some discussion of the significance of the problem identified in the specification as being overcome by the invention. Mr Derry suggested that in following the "problem and solution" approach to assessing inventive step, the EPO allowed the problem to be reformulated as an application progressed. That, he said, was necessary because the approach was based upon the problems associated with the nearest identified prior art which can change during processing of the application, for example as a result of the search. Thus, in Mr Derry's opinion, the problem overcome by the invention is not limited to the problem identified in the specification as originally filed according to EPO practice.

52 That may be so, but it is certainly the case that the description provides an opportunity for outlining the problem an invention seeks to overcome. It is an opportunity most applicants chose to take. Indeed the present applicants were no exception. The problems they identified were that traditional systems were reliant upon the person receiving a renewal letter appreciating its significance and knowing what to do with it, that a renewal letter might get lost, or that the recipient might be too busy to respond to it in a timely manner.

53 To my mind the problems identified by Mr Geary and in the description as originally filed are not technical problems. They are problems of human fallibility. As Aldous LJ made abundantly clear in his decision in *Fujitsu Limited's Application*[4] [1997] RPC 608, using a computer to overcome such problems is not of itself sufficient for an invention to necessarily make a technical contribution. In particular he said at line 38 on page 618:

> AMr. Birss is right that a computer set up according to the teaching in the patent application provides a new Atool@ for modelling crystal structure combinations which avoids labour and error. But those are just the sort of advantages that are obtained by the use of a computer program. Thus the fact that the patent application provides a new tool does not solve the question of whether the application consists of a program for a computer as such or whether it is a program for a computer with a technical contribution.@

54 At the hearing, Mr Geary sought to draw a distinction between the circumstances in *Fujitsu* and those existing in the present case. In *Fujitsu* he said, the invention was merely automating what had previously been done manually, namely the modeling of crystal structures. The present invention he said amounted to more than this. In the absence of any documentary evidence to the contrary I accept that the present invention does provide a new tool for making sure dates are not missed. I will come back to the nature of its distinctiveness later but how the problem is addressed does not in my view affect the nature of the problem which is to be solved. In my view the problem remains one of overcoming human fallibility and that in my opinion, is not a technical problem.

55 Mr Read said that the invention reduced the amount of mail sent and received. In so doing,

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[4] In the Court of Appeal

he said, the invention reduced the amount of data transmitted and in his opinion that was a technical rather than a business problem. He said that a system that reduced the amount of paperwork provided a technical effect over and above what was done before, namely simplifying the processes of sending the data and of receiving it. I do not agree. Changing the messaging regime so that the checks were carried out half as frequently but covered longer periods would provide similar advantages in terms of reducing the amount of email traffic. But that does not to my mind make such a regime patentable. I do not consider reducing the amount of mail to be sent to be a technical problem.

How the problem is solved

56 One potential source of the required technical contribution for any invention is of course the hardware through which it is put into effect. If that is novel and inventive, then the invention is clearly patentable. Mr Geary and his colleagues were reluctant to be drawn on the issue of whether the hardware through which the present invention was put into effect was conventional. They said that the hardware for implementing the invention was irrelevant. It was, they said, what was being done that was important, not the means that was used to do it. Indeed they did not feel I should infer anything from the fact that the embodiment the applicants had chosen to describe seemed to use entirely conventional computing apparatus. That, they said was merely the preferred embodiment. I accept that but it does not really help their case. What I am trying to do is identify all the potential sources of technical contribution that their invention might make. The applicants have chosen a claim structure where the invention is defined in terms of the result achieved and that does not help me decide whether the hardware is conventional or not. However, in the absence of any supporting disclosure to the contrary I can only assume that the hardware employed is entirely conventional. I certainly am not willing to infer that means unspecified provide the technical contribution.

57 I have already accepted that the invention defined in the claims does appear to provide a new tool through what it is doing. The nearest prior art identified by the examiner comprised a series of internet publications which disclosed systems for paying bills where emails including hypertext links were sent to clients but where each email related to a single action. They did not disclose the feature of an email relating to more than one event. Mr Geary argued that being time rather than event driven, his messaging regime was fundamentally different from anything that had previously existed. He said that the invention should be viewed not as a new business method but as a new signaling regime. He argued that the invention provided an improved communications system in which information was communicated more efficiently and effectively than previously. The invention was not characterized by the information contained in the signals but by the way it was signaled. In Mr Geary's view it was the "how" that gave the invention its technical character.

58 In support of this argument, Mr Geary drew an analogy with inventions relating to determining when to send registration signals from a mobile telephone to a base station. Mr Geary said he was unable to see any distinction between such a system and the present invention. If the mobile phone example was patentable he said, so should his system be. I do not agree. I can see a very definite difference. In the mobile telephone example, the timing of the registration signals is part of the process of ensuring that reception quality is

maintained. Ensuring reception quality seems to me to be a clear a technical problem. The present invention concerns signaling to ensure that important dates are not missed. And that to my mind is not a technical problem.

59 As further evidence of the existence of a technical contribution, Mr Geary referred me to the decision of Fox LJ in *Merrill Lynch* to which I referred earlier. Quoting with approval from *Vicom*, , Fox LJ said at line 8 on page 569:

> " 'Decisive is what technical contribution the invention makes to the known art'. There must, I think, be some technical advance on the prior art in the form of a new result (eg a substantial increase in processing speed as in *Vicom*)".

60 In Mr Read's view, the present invention provided just such a "new result" in the form of a new signaling pattern which provided the technical advantage of reduced signaling. Thus, he said, the invention provided the required technical contribution. Mr Read and his colleagues said the invention, resulted in less email traffic being generated thus reducing bandwidth requirements. This they said was achieved both by checking due dates on a regular basis eg once per week or per month, and by having each email correspond to more than one due date so that each client received a maximum of one email. Further consequences of this were that clients required less data processing resources to use this renewals system and users were not overburdened with information. Moreover, since it was easier to check whether one email had been processed than it was to check one hundred, the present system provided easier tracking of actions. All these were, in the applicants' representatives' view, sources of technical contribution. In short, they said that the invention operated at a different technical level so that messages containing different information were sent out at different times. It provided, they said, a new signaling regime and in doing so was patentable.

61 I do not agree. Whilst I accept that less email traffic does seem to result in the present system compared to the prior art systems, I do not accept this constitutes a technical contribution. At the hearing, Mr Geary referred me to the decision of the Board of Appeal of the EPO in BBC (T 0163/85) as evidence that signals per se are technical. I am perfectly happy to accept that. However, I fail to see how that helps Mr Geary's argument that the present invention is patentable. If the involvement of signals were sufficient to render an invention patentable then no computer implemented invention would ever be excluded. Such a conclusion would clearly be a nonsense. I am in no doubt that the present invention has technical character, but that is not the test I have to apply. That signals are involved does not mean that the invention makes a technical contribution.

62 The first source of the reduction in signaling identified by the applicants' representatives, namely conducting a regular, periodic check of all events due to occur in a given period before they actually fall due, is precisely the kind of process I would expect a diligent diary secretary to conduct in a weekly or monthly forward look. I do not consider that arranging the system so that messages are triggered from such a review rather than as individual tasks become due provides a technical contribution. The second source of the reduction in signaling, namely arranging the system so that each client only receives one email covering all their due dates seems to me to make no more of a technical contribution than does putting

two letters for a single client into the same envelope in a conventional mail system. It is precisely the sort of administrative process you would expect any conscientious, competent secretary to do in order to reduce costs and administrative burden. Carrying out such processes in an electronic environment does not in my view make any technical contribution. The end result might be an extremely useful new tool with a much lower likelihood for actions to be missed, but that does not make the invention patentable.

63 The applicants'representatives argued that when embodied as software, the invention resulted in a system that caused the hardware to operate differently at a technical rather than functional level. I do not agree. This distinction between functional and technical derives from the Board of Appeal decision in *IBM/Asynchronous resynchronization of a commit procedure* (T 1173/97). That decision can be summarized as saying that a computer program is not patentable merely because when run it causes a physical modification of the hardware on which it is run eg in causing different currents to flow. They are patentable if the running of the program causes a further technical effect beyond the normal interaction of a program and the computer. Moreover, that further effect can be external or internal to the computer. However, in the present case I am unable to identify anything that amounts to that further technical effect.

64 Considering first the external effects, I have found above that even though the claims are not limited to a patent renewal system, they none the less relate to an excluded activity. Thus the technical contribution cannot in my opinion be provided by the use to which the invention is put, namely informing a client of the approach of due dates. That the invention involves the issuing of electronic signals is again, in my opinion not sufficient for the invention to be said to provide a technical contribution for the reasons I have given above.

65 As for internal sources of the further technical effect, I am unable to identify anything in the way the hardware seems to operate when carrying out the invention that could be said to constitute it operating in a technically different way. Any change seems to me to follow on naturally from it carrying out the functions it is instructed to follow and thus to be entirely functional.

66 I am also unable to accept that the system provides a new signaling regime. The applicants have not developed a new communications protocol. In my opinion, the contribution the applicants have made is in realizing the administrative efficiency of regularly checking due dates in advance of them falling due and then notifying a client of all their due tasks via a single electronic communication. That, it seems to me, is a contribution to the field of administration, rather than a technical contribution. I have been unable to identify any technical contribution made by the invention defined in the independent claims that would make this otherwise excluded invention patentable.

67 At the hearing Mr Read asked me to give separate consideration to claim 2 in the event that I found the independent claims to be unpatentable. Claim 2 imposes the limitation that the electronic message sent to the client as per claim 1 does not identify the task due dates to which they relate. That information is only made available to the client when (s)he responds to the message by activating the hypertext link included in the message. At the hearing Mr Geary hinted that this provided the additional benefit that the client was encouraged to

access the web site to obtain this basic information. Presumably once the web site has been accessed there is a good chance that the client will undertake renewal actions. In my opinion, the problem to be overcome in doing this is again one of human fallibility, however useful it may be for the system to provide this functionality. It is not a technical problem. I can see nothing in this particular claim that could be said to provide the required technical contribution.

68 Furthermore, having read the specification in detail, I can find nothing disclosed in it which could form the basis of a patentable claim. In particular, and for completeness, putting the invention into practice using a computer system as per the specific embodiment seems to me to be a matter of conventional programming and involves no technical contribution.

Decision

69 I have found that in substance, the invention comprises a method for doing business and, in so far as I consider it to be implemented via a computer system, a program for a computer. Even if I am wrong on that I have found it to fall within the area of subject matter excluded by section 1(2) of the Act. Moreover, I have found that the invention makes no technical contribution and therefore amounts to excluded subject matter "as such". Consequently, I refuse the application under section 18(3) on the grounds that the invention is excluded under section 1(2)

Appeal

Any appeal against this decision must be filed within 28 days

Dated this 6th day of July 2004

A BARTLETT

Deputy Director acting for the Comptroller

The Patent Office