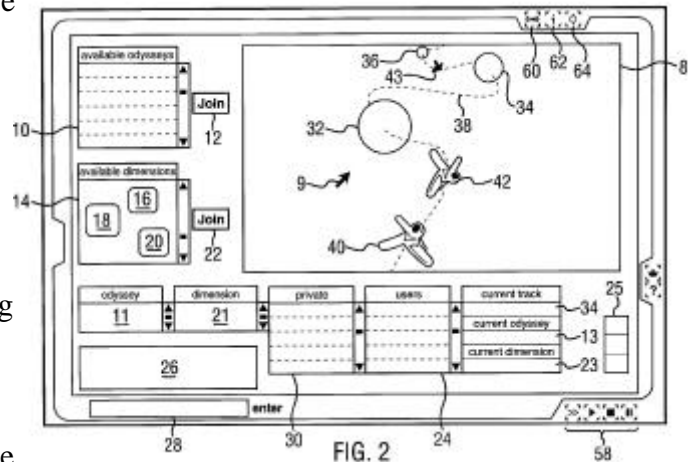


5 The application describes attempts that have been made to overcome this deficiency by creating “Multi-User Virtual Environments” (MUVEs) in which on-line users may navigate through a virtual space and communicate with other users by means of a multi-user chat application. The invention in this case concerns the use of a MUVE in the presentation of an on-line product catalogue and ordering system. In the embodiment described, the graphical user interface represents a virtual space through which users may navigate. Figure 2 of the application (see right) shows a typical screen display.

6 The virtual space includes some symbols representing products (eg. 32, 34) which are typically multimedia resources, and other symbols (eg. 40, 42) representing ‘real’ people navigating through the same virtual space. In the example shown in figure 2, the user himself is represented by the symbol 40. By clicking on the symbol of a particular product, the user may obtain specific product information and/or order a product on-line. By clicking on a symbol representing another person (eg. 42), the user may communicate with that person and discuss the products on offer.



7 The most important feature of the invention (as now claimed) is the use of a particular type of virtual space called an ‘odyssey’. An ‘odyssey’ is defined as a virtual space in which the products on offer are a **sequentially linked** set. When experiencing an odyssey, a user is constrained to follow a pre-defined route (38) through the virtual space. Any other users who have selected the same odyssey will also be following the same route. A plurality of odysseys are available, each representing a different product catalogue.

8 At the hearing, Mr Brown explained the advantage of an odyssey:

“That has the effect that for each user on his screen (if there are any other users shown on his screen), he automatically has knowledge of where they are, what they have seen, how far ahead of them they are in the odyssey, and whether it is worth contacting them to talk about their experience of this product. So that is quite different from a system where everybody is free to roam around. If you walk into that shop you have no idea who has been there, how long, what they are doing, what they have seen, or whether it is worthwhile communicating with them.”

The Law

9 The examiner has reported that the application relates to a scheme, rule or method for doing business and/or a program for a computer as such. This objection is based on section 1(2) of the Act, the essential parts of which are shown in bold below:

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

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

10 It has been established by the Courts that an invention will not be excluded from patentability by the above subsection if it makes a technical contribution. That is to say, if an invention makes a technical contribution, then it is *more than* one of the above excluded items, and cannot be regarded as “that thing *as such*”. This principle has been clearly set out by the Court of Appeal in *Fujitsu Limited’s Application*¹. At page 614, Aldous LJ said:

“However 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*. It has been accepted by this Court and by the EPO and has been applied since 1987. It is a concept at the heart of patent law.”

The Law - Consistent Interpretation

11 At the hearing, Mr Brown addressed me in some detail regarding the similarity between section 1(2) of the UK Patents Act and article 52 of the European Patent Convention (EPC). He reminded me that section 1(2) is among those sections of the Act that are defined in section 130(7) as being:

“... so framed as to have, as nearly as practicable, the same effects in the United Kingdom as the corresponding provisions of the EPC”

12 As Mr Brown said, it is also well established that the Comptroller must have regard to the decisions of the European Patent Office Boards of Appeal, at least insofar as they relate to these particular articles of the Convention.

13 The above principles of interpretation are well known, and acknowledged in a large number of Patent Office decisions. However, Mr Brown went further in his submissions, and suggested that the Courts in the UK have given a very clear instruction to the Patent Office that it should follow EPO examination practice in those areas of the Act listed in section 130(7). He based this submission at least in part on

¹ *Fujitsu Limited’s Application* [1997] RPC 14 at page 614.

the following passage from the judgment of Nicholls LJ in *Gale's Application*²:

“... it is of the utmost importance that the interpretation given to section 1 of the Act by the courts in the United Kingdom, and the interpretation given to Article 52 of the European Patent Convention by the European Patent office, should be the same. The intention of Parliament was that there should be uniformity in this regard. What is more, any substantial divergence would be disastrous. It would be absurd if, on an issue of patentability, a patent application should suffer a different fate according to whether it was made in the United Kingdom under the Act or was made in Munich for a European patent (UK) under the Convention.”

14 Mr Brown drew my attention to the words ‘disastrous’ and ‘absurd’ in the context of the above passage. As he put it, Nicholls LJ was making “a very strong point”. Moreover, he suggested that the alignment that Nicholls LJ envisaged was not an occasional process, but a continual, ongoing orientation. He submitted that on the basis of what Nicholls LJ said, the UK Patent Office should maintain its practice in line with EPO practice.

15 Until recently, the examination practice of the EPO was best illustrated by the decision of the Board of Appeal in the *Pension Benefits*³ case. According to *Pension Benefits*:

“An apparatus constituting a physical entity or concrete product, suitable for performing or supporting an economic activity, is an invention within the meaning of Article 52(1) EPC.” (Head note 3)

16 Thus the position seems to be that any claim which involves physical hardware must necessarily be an invention within the meaning of Article 52(1). On the other hand, method claims which concern the use of technical means for purely non-technical purposes and/or processing purely non-technical information are not necessarily inventions within the meaning of Article 52(1) unless the method is considered to be technical in character. More specifically the Board said:

“The Board notes that the mere occurrence of technical features in a claim does thus not turn the subject-matter of the claim into an invention within the meaning of Article 52(1). Such an approach would be too formalistic and would not take due account of the term ‘invention’.”

17 This meant that in *Pension Benefits*, the **method** claims were rejected on the grounds that they did not relate to a patentable invention, but the **apparatus** claims relating to the same invention were considered to relate to a patentable invention. The Board recognised that there was an apparent contradiction in this approach, but clearly felt that it was justified. The Board’s decision states:

“This distinction with regard to patentability between a method for doing business and an apparatus suited to perform such a method is justified in the light of the wording of Article 52(2)(c) EPC, according to which “schemes, rules and methods” are non-

²*Gale's Application* [1991] RPC 13 at page 323

³*Controlling pension benefits system/ PBS Partnership* T 0931/95

patentable categories in the field of economy and business, but the category of “apparatus” in the sense of “physical entity” or “product” is not mentioned in Article 52(2) EPC.”

- 18 Nevertheless, in *Pension Benefits*, the Board went on to refuse the apparatus claims on the grounds that they did not involve an inventive step; having concluded that improvements in the field of economics cannot provide the necessary inventive step.
- 19 But as Mr Brown pointed out, there has been a more recent decision from the EPO Board of Appeal in *Hitachi*⁴ which, although not entirely in agreement with *Pension Benefits*, appears to represent the EPO’s latest thinking regarding the distinction between patentable and unpatentable inventions.
- 20 In *Hitachi*, the Board clearly did not agree that the distinction with regard to method and apparatus claims set out in *Pension Benefits* was justified. The Board said (point 4.5):

“What matters having regard to the concept of “invention” within the meaning of Article 52(1) EPC is the presence of technical character which may be implied by the physical features of an entity or the nature of an activity, or may be conferred to a non-technical activity by the use of technical means. In particular, the Board holds that the latter cannot be considered to be a non-invention “as such” within the meaning of Article 52(2)and(3) EPC.”

- 21 Consequently in the light of *Hitachi*, methods which involve the use of technical means are considered to be inventions within the meaning of Article 52(1) of the EPC. As the Board itself recognised (point 4.6), this:

“... comparatively broad interpretation of the term “invention” in article 52(1) EPC will include activities which are so familiar that their technical character tends to be overlooked, such as the act of writing using pen and paper.”

- 22 This does not mean that a patent should be granted in respect of a method simply because it involves technical means. In the *Hitachi* case for example, when considering whether the claims involved an inventive step, the Board would take account of only those features that contributed to the technical character of the invention. As a general principle the Board concluded that:

“Method steps consisting of modifications to a business scheme and aimed at circumventing a technical problem rather than solving it by technical means cannot contribute to the technical character of the subject-matter claimed.”

- 23 After stripping out the non-technical features of the invention in *Hitachi*, the Board of Appeal was unable to find an inventive step and the application was refused on this basis.

- 24 The practice of disregarding non-technical features of a claim when considering novelty and inventive step is not a new concept in UK patent law. In *Merrill Lynch*⁵,

⁴*Auction method/Hitach* T 0258/03

⁵*Merrill Lynch Inc. 's Application* [1988] RPC 1 at page 9

Falconer J upheld the reasoning of the Comptroller's Hearing Officer who expressed what was then current practice in relation to section 1(2) as follows:

“I am of the opinion that this wording ...should be understood as meaning that anything which is in an excluded category is not to be treated as an invention and consequently its inclusion cannot be considered to contribute to the required novelty and inventive step.”

25 However, the reasoning of the Hearing Officer and Falconer J was regarded as erroneous in this respect by the Court of Appeal — firstly in *Genentech*⁶ and later when the Court of Appeal considered *Merrill Lynch*⁷. In *Merrill Lynch*, Fox LJ said:

“The view of Falconer J was that if the novelty of the claim was in matter excluded by section 1(2), then you ignore that and look only at what is left, *ie.* a conventional computer which is not patentable. That approach was held to be wrong in *Genentech* ...”

26 In the light of these two judgments from the Court of Appeal, the practice of examiners in the UK Patent Office changed. Thereafter, the substance of the claimed invention is construed as a whole, regardless of its constituent parts. The examiner then looks to see whether the substance of the claimed invention amounts to more than one of the excluded items. If that is the case, then there is a patentable invention; but if not, then there is not an invention, at least for the purposes of the Act.

27 When determining whether the substance of the claimed invention amounts to more than one of the excluded items, the examiner will pay particular regard to the technical contribution made by the invention for the reasons given in paragraph 10 above.

28 Thus comparing practice in the UK Patent Office with the latest EPO practice as exemplified by the *Hitachi* case, it is clear that there is a difference, as Mr Brown submitted. However, it does not necessarily follow that the two different processes will lead to two different results. It appears from the reasoning in *Hitachi*, that the Board of Appeal also concluded that a technical contribution was essential, because when considering the matter of inventive step, the Board only took account of those features of the invention that contributed to its technical character.

29 Strictly speaking this is a narrower interpretation than that established by the Courts in the UK as it requires that the technical contribution and the inventive step both reside in the same features of the invention. After the Court of Appeal expressly rejected this approach of distinguishing between the excluded and non-excluded features of a claim, the practice of the UK Patent Office has been to look for a technical contribution anywhere in the claimed invention. With this in mind, I suggested to Mr Brown at the hearing that it would be an interesting exercise to consider the fate of his application according to the current practice of the EPO and the UK Patent Office separately.

30 Moreover it would not be purely an academic exercise in view of Mr Brown's submission regarding the importance of consistency between the two Offices, and in

⁶*Genentech Inc.'s Patent* [1989] RPC 9 at page 239 - 240

⁷*Merrill Lynch's Application* [1989] RPC 19 at page 567 - 569

particular his suggestion that Nicholls LJ's comments⁸ in *Gale* represent an “overriding dictum” — ie. placing a responsibility on the UK Patent Office to adapt its examination practice as necessary to ensure that a patent application should not suffer a different fate according to whether it is examined in the UK or at the EPO. If the outcome of this application were to depend on which practice is followed, then this would add weight to Mr Brown's submission. I have therefore decided to consider the patentability of this application separately according to the respective reasoning of the UK Courts and the EPO Board of Appeal, as I intimated to Mr Brown at the hearing.

The outcome according to UK practice

- 31 The first task, as Mr Brown agreed, is to construe the claim as that is where the invention is defined. The claims of the application have been amended several times during the examination process, but claim 1 as amended now reads as follows:
1. A method of presenting an on-line product catalogue and ordering system to a user in a data networked computer apparatus, said method comprising providing a graphical user interface representing a virtual space through which users are able to navigate along a given journey path, said virtual space including product representations representing products, through which a user is able to obtain product information and order a product on-line, said product representations being arranged as a sequence thereof interlinked by said given journey path, and user representations representing other current users of the system and positioned along the given journey path, through which the user is able to identify such other current users and communicate with a selected other user regarding the products on offer.
- 32 There are three other independent claims, but I have not reproduced them here as they only differ from claim 1 in form, and not in substance.
- 33 On the question of substance, Mr Brown submitted that the examiner had assessed the substance of the invention incorrectly. He argued that the correct test was to look at the features of the claim, without making any comparison with the prior art, and decide whether the features have a technical aspect. As he put it, the prior art doesn't matter at this stage. He went on to point out a list of six specific features within the claim that he regarded as being technical, and which satisfied the requirement for a “technical aspect”. The features included: a graphical user interface (GUI) to enable the user to navigate through a “virtual space”, various representations with the virtual space, on-line data communication to obtain information and place an order for a product etc.. According to Mr Brown, these features all contribute to the technical aspect of the invention, and thereby constitute the necessary technical contribution. Although I have to agree that there is a technical aspect to the claim, I cannot see that it is a technical aspect in the sense in which the term was used by Aldous LJ in *Fujitsu*. There were many technical features in the claim in *Fujitsu* (some of which were very similar to the features that Mr Brown pointed out in his claim), but the Court of Appeal clearly did not consider that the presence of these technical features in the claim was sufficient.
- 34 Mr Brown was concerned that the examiner had assessed the substance of the

⁸See paragraph 13

invention too narrowly, and that he had only considered the feature (or features) that distinguish the invention over the prior art. Clearly there is a balance that has to struck here. It cannot be right, not least having regard to the outcome in *Fujitsu*, to accept the presence of conventional technical features in a claim as automatically providing the required technical contribution. On the other hand, as Mr Brown argued (very persuasively), section 1(2) is not concerned with what is, and what is not, prior art. The issues that arise under section 1(2) and article 52(2) of the EPC are more fundamental — eg. as Mr Brown expressed it: “Is this the kind of invention for which Parliament intended a patent to be granted?”

35 In striking a balance between these two constraints, and while seeking to identify a technical contribution in a claimed invention, it seems reasonable to me to overlook those features of the claim that are clearly ‘incidental’ to the invention, regardless of whether or not they are known in the art. It is therefore not a question of looking for a technical contribution in only the novel and inventive elements of an invention. In order to help me to make a reasonable assessment in this case, I asked Mr Brown if he were drafting a claim for the EPO, what would he include after the phrase “... characterised in that ...”? He replied:

“The characterising feature of the claim would necessarily be the constraining to move along the given journey path.”

36 This is also my understanding of the characterising feature of the invention based on a careful reading of the whole specification; and I note that it is also reflected in an alternative version of claim 1 that Mr Brown provided for the examiner’s consideration a few days before the hearing. As Mr Brown explained, this alternative version “... clarifies the technical feature that all of the user representations displayed on the graphical user interface are positioned along the same journey path, and are constrained to move along that path.” The alternative version of the claim ends with the words:

“... wherein each said other user representation is positioned along the same said given journey path, the user and the other user representation[s] being caused to move, under user navigable control, along said given path.”

37 Taking the best view I can of the matter, I am unable to agree with Mr Brown that the invention described in this application involves a technical contribution. It would undoubtedly require a certain amount of technical skill to modify an on-line product catalogue and ordering system in order to constrain users to follow a pre-defined path, but I do not think that a competent computer programmer would need to exercise any inventive flair in order to do so. As I pointed out to Mr Brown at the hearing, the application does not explain how this alleged technical contribution is achieved in practice — which supports my initial impression that it is something that the person skilled in the art could reasonably be expected to work out for themselves. Therefore, following UK law and practice, I would conclude that the invention claimed in this application is a scheme for doing business as such. Furthermore, inasmuch as the scheme is implemented using a program for a computer, it would appear to fall foul of this exclusion as well. However, as I stated above, before reaching a final conclusion in relation to Mr Brown’s submissions on consistent interpretation, I will now consider as best I can, what the fate of this application might have been if it were to be decided

in accordance with the EPO Board of Appeal's approach in the *Hitachi* case.

The outcome according to the Board of Appeal's approach

- 38 The Board of Appeal in *Hitachi* concluded that, in general, a method involving technical means is an invention within the meaning of article 52(1). *Hitachi* also makes it clear that claims to the same invention, but which are merely expressed in a different form (ie. apparatus, method etc.) should not be treated differently. There can be no doubt that all of the claims in the application before me involve the use of technical means and I have no hesitation in deciding that this application would not be rejected by the EPO under article 52.
- 39 However, that is not the end of the matter. In order to assess inventive step according to this approach, I must take account of only those features which contribute to a technical character⁹. I should say here that Mr Brown was not particularly keen to re-open the question of inventive step, since the UK examiner had conceded that the invention in this application was not obvious having regard to the prior art. Nevertheless, one cannot split up the examination practices of the UK Patent Office and the EPO according to the various sections or articles and then put together a hybrid system that offers the most advantageous route through the examination process. In fairness to Mr Brown, he did not explicitly suggest that I should do this.
- 40 As Mr Brown agreed at the hearing, the feature that distinguishes (or characterises) the invention from the prior art is the concept of constraining a user to navigate through an on-line product catalogue according to a pre-defined route — ie. an 'odyssey'. As far as I can tell from the application, the concept of an odyssey is not intended to solve a technical problem — at least, not what I would regard as a technical problem. The benefit that a user gets from an odyssey is additional information regarding other users that are following the same odyssey. That is to say, one can see how far ahead they are in the odyssey. This additional information can then be used to decide whether it is worth contacting them to talk about their experience of a product. There appears to be no advantage to the 'owner' of the on-line shop as a result of constraining users to follow a pre-defined route, other than that which follows indirectly from having better-informed, and perhaps happier, customers.
- 41 Presenting the situation in the present application in terms of a problem/solution approach, the '**problem**' is that potential customers are wandering around in a virtual space not knowing which other customers have experienced particular products, and therefore being unsure whose opinions to seek. The '**solution**' is to constrain all users in that virtual space to follow the same route, so that they all consider the products in the catalogue in the same sequence. In *Hitachi*, the problem that the invention sought to overcome concerned the data transmission delays in a communication system which were likely to influence the outcome of an on-line auction. The solution was to change the rules of the auction such that bidders are required to submit certain information about their bidding limits in advance so that the auction can then be conducted automatically and without the bidders being required to follow the auction on-line.

⁹See paragraph 22 above

42 This is the solution that the Board of Appeal described as a “modification to a business scheme” aimed at circumventing a technical problem rather than solving it; and thus unable to contribute to the technical character of the subject-matter claimed. Following this approach in the present application, I cannot avoid coming to a similar conclusion. Constraining potential customers to follow a pre-defined route through an on-line product catalogue instead of allowing them to browse at random is surely a “modification of a business scheme”. So even if, with a considerable stretch of the imagination, I regard the problem as being technical, the solution (modifying a business scheme) appears to be one that would not have satisfied the Board of Appeal.

43 Therefore it appears to me that this application would also have been refused in line with the latest EPO practice, on the grounds that it does not involve an inventive step.

Conclusion - Consistent Interpretation

44 Returning to Mr Brown’s submissions regarding the difference in practice between UK law and EPO practice as outlined in paragraphs 11 to 30 above, I have concluded that the present application would have suffered the same fate regardless of whether it was made in the UK under the Act or at the EPO. Consequently, as least as far as this application is concerned, the principle of interpretation laid down in section 130(7) has been maintained since the operation of section 1(2) has had the “same effect” as the corresponding provision of the EPC.

Benefit of the Doubt

45 During his closing remarks at the hearing, Mr Brown reminded me that the Comptroller was obliged to give applicants the benefit of the doubt, especially where the statutory exclusions are concerned — a principle confirmed by Laddie J in *Fujitsu*¹⁰. I fully accept this, but having carefully considered all the arguments presented in support of the patentability of this application, and having read the application through several times, there is no doubt in my mind that the invention as claimed (and as described) in this application is excluded from patentability. Moreover, I cannot see any means of amending the application, that would overcome this exclusion.

Conclusion - Summary

46 I have decided that this application relates to a scheme for doing business — ie. constraining potential customers using an on-line product catalogue to follow a pre-defined route through the catalogue. I have also found that the application relates to a program for a computer. I have not been able to identify any technical contribution made by the invention, and therefore I have concluded that the application relates to these two excluded items “as such”. Consequently the invention is not an invention for the purposes of the Act, and I hereby refuse the application under section 18 on the grounds that the invention claimed therein is excluded by section 1(2)(c).

Appeal

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

¹⁰*Fujitsu Limited’s Application* [1996] RPC 17 at page 533

be lodged within 28 days.

S J PROBERT

Deputy Director acting for the Comptroller