

PATENTS ACT 1977

IN THE MATTER of
patent application
GB 9900566.2 in the name
of John Edward Rose

DECISION

Background

1. Patent application GB 9900566.2 was derived from an international application PCT/GB97/01898 with an international filing date of 14 July 1997 and a priority date of 16 July 1996. It was filed in the name of John Edward Rose. Form NP1, to request national processing, together with Forms 9/77 and 10/77 to request preliminary examination and search, and substantive examination respectively, were filed on 13 January 1999 by Swindell & Pearson, the appointed Agents. On entering the national phase, the application was given the patent application number GB 9900566.2. The substantive examination was conducted on the basis of amended claims 1-28 filed on 13 January 1999.
2. The application is entitled "Behaviour modification" and relates to a method and apparatus for behaviour modification which takes place under hypnosis, during which the subject is instructed to activate a device to create a perceptible stimulation which is linked through the hypnosis with a visualisation of enhanced or improved performance. After the hypnosis, the user re-activates the device whenever improved performance is desired.
3. In an official letter dated 6 October 1999, the examiner objected to the patentability of the method claims under Sections 1(1)(c) and 1(2)(c) on the grounds that they amounted to a method of performing a mental act and involved no technical contribution. The other claims, which related to apparatus for carrying out the method were objected to under Sections 1(1)(a), 14(5)(b) and 14(5)(c) on the grounds of lack of novelty, clarity and support. In the course of further correspondence, objection was also raised under Sections 4(1) and 4(2) on the grounds that the invention could not be used in any kind of industry and embraced methods of therapy.
4. Following an exchange of letters and a telephone conversation between the examiner and the Agent, the claims were restricted to delete the apparatus claims. The patentability issue was not resolved and the matter came before me at a hearing on 23 January 2001 which was attended by the applicant's Agent (Mrs Helga Chapman) and the examiner (Mrs Susan Chalmers).
5. Form 52/77 was filed on 11 January 2001 to extend the Rule 34 period by 1 month to end on 16 February 2001. Shortly before the hearing, the applicant's Agent

submitted further arguments and amended claims to a method defined with regard to the apparatus used and a set of apparatus claims. These were considered by the examiner who remained of the view that the claims did not relate to a patentable invention.

6. During the correspondence between the examiner and the Agent with regard to the patentability of the invention, the following reported cases were brought to the attention of the applicant by the examiner:

Merrill Lynch's Application [1989] RPC 561
Gale's Application [1991] RPC 305
Lux Traffic Controls [1993] RPC 107
Fujitsu Ltd's Application [1997] RPC 608
Peet's Application [2000] Patent Office Decision, BL 0/360/000
Vicom [1987] 1 OJEPO 14 (T 208/84)
Pension Benefit Systems Partnership [2000] T 0931/95 - not yet reported

Patent application

7. Claim 1 as considered at the hearing reads as follows:

“A method of stimulating performance in a human subject, by the use of apparatus comprising a pre-recorded visualisation programme which induces hypnosis when experienced by a human subject, and stimulation means comprising a manually operable control member connected to a power source, said stimulation means being operable under the control of the subject to provide a stimulation in direct response to activation of the control member by the human subject during the activity for which performance is to be enhanced, the visualisation programme being so arranged such that after experiencing the programme the subject visualises performance enhancement in response to the subject operating the perceptible stimulation means, the stimulation means being adapted to be attachable to any convenient body part of the user, the method comprising the steps of:

- (a) hypnotising the human subject and subjecting him to a visualisation programme while under hypnosis;
- (b) applying a mechanically or electrically operated stimulus to the subject during the playing of the visualisation programme;
- (c) reapplying the said stimulus after hypnosis under the control of the subject during the activity for which performance is to be enhanced.”

Claims 2-11 cover preferred features of the method.

8. Claim 12 reads:

“Apparatus for stimulating performance enhancement, comprising a pre-recorded visualisation programme which induces hypnosis when experienced by

a human subject, and stimulation means comprising a manually operable control member connected to a power source, said stimulation means being operable under the control of the subject to provide a stimulation in direct response to activation of the control member by the human subject during the activity for which performance is to be enhanced, the visualisation programme being so arranged such that after experiencing the programme the subject visualises performance enhancement in response to the subject operating the perceptible stimulation means, the stimulation means being adapted to be attachable to any convenient body part of the user.”

Claims 13-14 cover preferred features of the apparatus.

The law

9. The relevant sections of the Patents Act for the purpose of the matters in issue at the hearing are Sections 1(1) and (2), 4(1) and (2) which read:

Section 1(1):

“A patent may be granted only for an invention in respect of which the following conditions are satisfied, that is to say -

- (a) the invention is new;
- (b) it involves an inventive step;
- (c) it is capable of industrial application;
- (d) the grant of a patent for it is not excluded by subsections (2) and (3) below;

and references in this Act to a patentable invention shall be construed accordingly.”

Section 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) 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.”

Section 4(1):

“Subject to subsection (2) below, an invention shall be taken to be capable of industrial application if it can be made or used in any kind of industry, including

agriculture.”

Section 4(2):

“An invention of a method of treatment of the human or animal body by surgery or therapy or of diagnosis practised on the human or animal body shall not be taken to be capable of industrial application.”

Under section 18(3) of the Act an application may be refused if these requirements, amongst others, are not met.

The Hearing

10. At the hearing the arguments to some extent focussed on the allowance of the method and apparatus claims separately although I indicated that as far as the patentability issue was concerned I saw them as linked because of the need to take into account the whole invention. There was however an issue of novelty to be decided which concerned only the apparatus claims and this was taken first as a self-contained item.

Novelty of the apparatus claims

11. Mrs Chapman submitted that the new set of claims was novel over US 5425699 (hereafter “Spiegel”) in that the stimulation means was “operable under the control of the subject to provide a stimulation in direct response to activation of the control member by the subject during the activity for which performance is to be enhanced”. In contrast, Spiegel disclosed a wristwatch which was pre-programmed to provide a stimulus at set times so that the subject had no direct control over the stimulus.
12. The problem for Mrs Chapman was that she was trying to distinguish the apparatus of the invention from Spiegel by having a functional limitation on the control member. There was no disclosure in Spiegel of a control member which was operable to provide the stimulus immediately upon pressing the button. In her view to have a control member which was directly operable by a human subject during the activity for which performance is being enhanced was clearly a limitation. Whilst I agreed with that view, the wording of the present claim 12, as pointed out by the examiner, did not make a sufficient distinction over the disclosure in Spiegel. Mrs Chapman then suggested that the novelty objection might be met by redrafting the claim to say that the power source was connected to the stimulation means. The examiner agreed that this could provide a way forward but wished to reserve judgment until having had the chance to consider the proposed wording.
13. Even if claim 12 could be suitably redrafted, and I believe it could, Mrs Chapman was obviously concerned about the patentability of the invention embodied in such a claim. I said that we needed to discuss patentability issues in the round and I would want to consider whether the apparatus claims were acceptable in the event that the method claims were not. The issue of novelty was self-contained and was relatively easily dealt

with as long as the invention as a whole was patentable. At that point, the hearing went on to consider whether the invention fell within an excluded category.

Excluded invention - Section 1(2)

14. Mrs Chapman submitted that the present invention as claimed, particularly in the method claims, did not fall within any of the exclusions of Section 1(2). In respect of the apparatus claims I understood her to be saying that, whatever the fate of the method claims, they should be found acceptable because they related to a novel set of apparatus which could be sold in industry and was inventive over the prior art. So, I must deal with the apparatus claims separately at some point if I find the method claims to be unacceptable because they relate to an excluded invention.
15. More particularly, Mrs Chapman sought to persuade me that claim 1 as it stood was not solely a mental act because it had a technical character. In particular, there were technical features such as the application of the stimulation means and the playing of a visualisation programme. In combination, these features produced a technical effect of improving performance, for example in terms of the length of a golf shot, which could be measured and monitored in the same way as a technical effect from other classes of invention. She submitted that patentability should not be denied merely on the grounds that hypnosis or choice by the human subject was involved with the process steps. The result was not essentially intellectual of the kind that could be produced mentally by a human but rather an increase in actual performance.
16. Mrs Chapman felt that it was tenuous to say that the invention did not fall within patentable subject matter i.e. in the “among other things” category just because it lay outside that list of specific exclusions mentioned in Section 1(2). She pointed out that the case law on that ground was extremely limited and should be looked at on the facts of each case. In her view, the *Lux Traffic Controls* case did not provide a precedent for refusing this application.
17. Whilst the individual merits of a particular precedent case might be questionable, I pointed out that all of the cited precedent cases seemed to be saying that there was the requirement for an invention to make a technical contribution. Mrs Chapman felt that the present application had a substantially more technical character than some of the cited precedent cases. She drew my attention to the *Pension Benefits Systems Partnership* decision, which found that having a technical character was an implicit requirement for an invention under the EPC. She therefore argued that if the method claim did have technical character, it could not be included within the “as such” limitation of Section 1(2). She also reminded me that the Manual of Patent Practice stated that “only if the contribution to the art lies in an excluded field should further consideration be made to whether the invention has an overall technical effect.” In coming to my decision, she therefore urged me to decide firstly whether the invention did fall within the “among other things” exclusion of Section 1(2) and only then, if I found the invention were excluded, to consider whether there was a technical effect to see whether the invention falls within the “as such” exclusion.

18. In reply, the examiner said that she was unable to agree that the invention had a technical character or made a technical contribution and that it had a technical effect. In her view, in its broadest aspect, the method claimed appeared to relate to the use of an externally generated stimulus to elicit a post-hypnotic suggestion. In the embodiment illustrated in the application, hypnosis was used in conjunction with a mechanically or electrically operated stimulus to induce the subject to associate in his/her mind the stimulus with the suggestion. She therefore considered that the hypnosis process, the playing of the visualisation programme, the process of inducing the association between the stimulus and the visualisation programme and the post-hypnotic process of re-creating the visualised behaviour in response to the operation of the stimulus were subjective. In her opinion, the fact that the subject chose, post-hypnosis, to activate the external stimulus to elicit this association was a specific aspect of the suggestions planted by the hypnosis process and did not involve any technical character or technical contribution. While the method might give rise to a measurable improvement in performance, she was unable to agree that this effect was technical.

Industrial applicability - Sections 1(1)(c), Sections 4(1), 4(2)

19. Mrs Chapman emphasised that Section 4(1) applied to “being capable of being made or used in any kind of industry”. The invention was clearly applicable to a number of industries such as the sports development industry or the teaching industry. She drew my attention to the fact that there were very few precedent cases dealing with this issue and she argued that I should interpret “industry” broadly. However, she noted the examiner’s objection under Section 4(2) to the description which referred to “overcoming phobias, fear, stress, road rage, insomnia and hypochondria” and proposed to delete this from the description to meet the objection.
20. In conclusion, Mrs Chapman submitted that in coming to my decision I should construe the Section 1(2) exclusions narrowly. In particular, she urged me to adopt the approach of the Hearing Officer in *Peet’s Application* at [29]:

“I am approaching this on the basis that I should refuse the application only if I am certain that it is excluded by virtue of Section 1(2) and that I should give the applicant the benefit of any doubt in this respect.”

She also argued that I should give equal consideration to the apparatus and method claims. The invention was not simply an excluded method that fell within the Section 1(2) exclusions; it was also a novel apparatus which could be sold in industry, was inventive and provided an advantage. She therefore believed, given that the role of the Patent Office was to grant patents, that there were grounds for granting a patent even if it were only on the basis of the apparatus claims.

21. The examiner agreed that Section 1(2) should be construed narrowly. However, she drew my attention to the findings of *Merrill Lynch*, *Gale*, *Fujitsu* and *Vicom* that I must look not just at the words of the claims but also at the substance of the invention. In

particular, I must consider the whole entity claimed and determine whether the overall process involved had a concrete technical effect. Specifically, she reminded me that in *Fujitsu's Application*, Aldous LJ observed that:

“Methods of performing mental acts, which means methods of the type performed mentally, are unpatentable, unless some concept of technical contribution is present”.

Decision

22. My decision takes account not only of the submissions at the hearing but also, since I have read all the papers, the arguments raised in all the correspondence filed prior to the hearing. In addition, because I was concerned when preparing this decision that the question of inventive step in respect of the apparatus claims had not been fully argued at the hearing, I arranged for a letter to be sent to Mrs Chapman inviting further argument if she wished. A reply to that letter was faxed into the Office on 13 February 2001 and I have taken its contents into account.
23. I am approaching my decision on the basis that I should refuse the application only if I am certain that it is excluded by virtue of Section 1(2) and that I should give the applicant the benefit of any doubt. In doing so, I am following the approach taken by the Hearing Officer in *Peet's Application*.

Method claims

24. I am persuaded that, in its broadest aspect, the method claimed appears to relate to the use of an externally generated stimulus to elicit a post-hypnotic suggestion. In my view, and in this I agree with the examiner, the method taken as a whole is subjective. Since the process of visualisation takes place in the brain of the subject, the question of whether the stimulus allows a subject to visualise something is essentially a mental act. In particular, I do not consider that the fact that the subject chooses, post-hypnosis, to activate the external stimulus to visualise enhanced performance involves any technical character or technical contribution. While the method may give rise to a measurable improvement in performance, I am unable to agree that this effect is technical but is merely an extension of what is going on in the mind of the subject.
25. Although the claimed method clearly involves a mental act, I need to take account of the fact that claim 1 also involves a number of mechanical steps such as playing the visualisation programme and applying a stimulus to the subject. Thus it might be argued that the method does not fall full square within Section 1(2)(c). However, even if I were prepared to accept this argument, in my view, the method when taken as a whole must be regarded, at least, as so closely analogous to a method of performing a mental act for it to be covered by the phrase “among other things” as stated in Section 1(2). In *Lux Traffic Controls Ltd*, which is concerned with apparatus for controlling traffic flows, Aldous J observed that :

"..... s.1(2) of 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. The field expressly excluded by the section concerns mere ideas not normally thought to be the proper subject for patents which are concerned with manufacturing."

Thus the exclusion may also apply to other matters which are essentially abstract or intellectual but which do not necessarily fall clearly into one of the specified categories specifically listed.

26. Looked at from a slightly different way, the issues in this application would appear to be similar to those in the *Pension Benefits Systems Partnership* case where the appellant argued that the use of data processing and computing means defined in a method claim conferred technical character to the method claimed. Subsequently, in its decision the Technical Board of Appeal in the European Patent Office reasoned that:

"The feature of using technical means for a purely non-technical purpose and/or for processing purely non-technical information does not necessarily confer technical character to any such individual steps of use or to the method as a whole: in fact, any activity in the non-technical branches of human culture involves physical entities and uses, to a greater or lesser extent, technical means."

27. This reasoning, on top of what I have already said about the method claims in the present application, leads me to the conclusion that the invention encompassed therein should be excluded under section 1(2).

Apparatus claims

28. I now turn to the patentability of the apparatus claims. In this respect, I turn again to the decision in *Pension Benefit Systems Partnership* which, like the present case, was concerned with method and apparatus claims, albeit for controlling a pensions benefit system. Although finding the method claims non-patentable as involving economic concepts and practices of doing business, the Technical Board of Appeal was prepared to accept that the apparatus was an invention within the meaning of Article 52(1) of the Convention, the equivalent of section 1(1) of the 1977 UK Act. The Board concluded that:

"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."

29. Turning to the application and having regard to the above, I therefore conclude that, even though in my opinion the method claims of the application relate to a method excluded by Section 1(2), an apparatus for carrying out the method is an invention

within the meaning of Section 1(1). What I must now do is to go on and decide whether the apparatus satisfies the main patentability requirements, that is whether it is new, involves an inventive step and is industrially applicable as required by Section 1(1).

Novelty

30. Stripped of the functional language, claim 12 seeks protection for apparatus suitable for stimulating performance enhancement comprising a pre-recorded visualisation programme and a stimulation means comprising a manually operable control member connected to a power source, the stimulation means being adapted to be attached to any convenient body part of the user.
31. I agree with the examiner that, as currently worded, claim 12 lacks novelty over Spiegel, the closest prior art. However, from arguments put forward at the hearing, as indicated above, it appears that the novelty objection could be met by further amendment of the claim, for example by clarifying the relationship between the stimulation means and the power source. Thus, if I find the apparatus claims otherwise acceptable, there is no reason why a simple amendment would not be able to overcome the novelty objection.

Inventive step

32. I now move on to the requirement for an inventive step. What I need to decide is whether the claimed combination of a pre-recorded visualisation programme and stimulation means satisfy the requirements of Section 1(1)(b).
33. In her letter of 13 February 2001 Mrs Chapman argues for the inventive step of the apparatus claims on the basis that Spiegel is directed to solving a quite different problem compared to the present invention which is directed to performance enhancement under the control of the user and at the time of his choosing. Therefore, a skilled person would not be directed by Spiegel to providing a device which is directly operable by the user when he wishes his performance to be enhanced.
34. Whilst this argument is superficially attractive in suggesting that there might be an inventive step encompassed in the apparatus claims, I believe I must take into account the reasoning in the *Pension Benefit Systems Partnership* decision where the Board of Appeal was faced with a similar problem.
35. In its decision, the Board of Appeal states at point 8 (third to fourth paragraphs) that:

“... the improvement envisaged by the invention according to the application is an essentially economic one ie lies in the field of economy, which, therefore cannot contribute to inventive step. The regime of patentable subject matter is only entered with programming of a computer system for carrying out the invention. The assessment of inventive step has thus to be carried out from the

point of view of a software developer or application programmer, as the appropriate person skilled in the art, having the knowledge of the concept and structure of the improved pension benefits system and of the underlying schemes of information processing as set out for example in the present method claims.

Regarding the technical features of the apparatus claimed are functionally defined by precisely those steps of information processing which form part of the knowledge of the skilled person and that application of computer systems in the economic sector has already been a general phenomenon at the priority date of the application, it must be concluded that the claimed subject matter does not involve an inventive step.”

36. The person skilled in the art of hypnotherapy would know from Spiegel of the use in hypnotherapy of post-hypnotic suggestions which are “cued” by stimuli, internal or external to the subject, that occur later when the subject is not in an hypnotic state. In particular, the skilled person would be aware of the combination of a pre-recorded audiotape and an externally-generated stimulus such as an audible, visual or tactile stimulus, to plant a post-hypnotic suggestion to elicit the desired behaviour. However, as I have emphasised above, the contribution provided by the present invention is essentially one that resides in the area of being a mental act or something so similar as to be excluded from patentability. As such, as I understand the reasoning of the Board of Appeal, where an improvement resides in an excluded area it cannot contribute to inventive step.
37. Therefore, given that the technical features of the claimed apparatus are functionally defined with reference to the non-patentable method, and that this method provides the only driving force for bringing together the individually known elements of the claimed combination, I am of the opinion that the claimed apparatus does not involve an inventive step.

Industrial applicability

38. Having found that the claims of the application should not be allowed for the reasons I have given above, it is not really necessary for me to go into the arguments about whether the invention is capable of industrial application. However, construing the definition of “industry” in a broad sense suggests that the apparatus, at least, is so capable and were this the only matter to be considered I would have given the applicant the benefit of the doubt subject to the agreed deletion of the passages relating to “overcoming phobias, fear, stress, road rage, insomnia and hypochondria”.

Conclusion

39. Being mindful of the general legal principle that I should construe any exclusions narrowly, I have therefore carefully considered whether there is any feature or combination of features disclosed anywhere in the application as filed which could be

said to make a technical contribution. There are features concerning the content of the visualisation programme and details of the stimulation means but I have not been able to identify any feature or features that could provide a technical contribution and thus form the basis of a patentable invention. Nor have I, in respect of the apparatus claims, been able to identify anything that involves an inventive step.

40. For these reasons I have decided that a patent should not be granted on this application.

Appeal

41. This is a substantive matter so the period within which any appeal to the Patents Court from this decision must be lodged is six weeks.

Dated this 14 day of February 2001.

DEREK WOOD

Deputy Director, acting for the Comptroller

THE PATENT OFFICE