

OPINION UNDER SECTION 74A

Patent	GB 2363891
Proprietor(s)	Mr Geoffrey David Fairfield
Exclusive Licensee	
Requester	Mr Geoffrey David Fairfield, on 30 August 2006
Observer(s)	Shopkit Designs Ltd
Date Opinion issued	27 November 2006

The request

1. The comptroller has been requested to issue an opinion as to whether GB2363891B (the Patent) is valid. The requester Geoffrey David Fairfield is the proprietor of this patent. More specifically the request seeks an opinion as to whether the claims involve an inventive step having regard to an argument attributed to a potential infringer, Shopkit Designs Limited (Shopkit).

Observations

2. Observations in response to the request were received as above from Shopkit. These observations were accompanied by the documents below pertaining to the observer's argument that the claims are indeed obvious. No observations in reply were received from the requester.
 - a. Design Week 23 October 1998. A copy of an un-numbered page carrying an advertisement by Shopkit.
 - b. A copy of a design drawing dated September 1998 prepared by Shopkit.
 - c. A copy of a quotation from Shopkit to BA Travel Shops for removal of display boards, dated 31st January 2000.

Background

3. It may be useful to set out the circumstances of this request, before

beginning a substantive consideration of the validity of the Patent. The request indicates the possibility of a dispute regarding potential infringement of the Patent by Shopkit, which is stated to be disputing validity. The requester has set out an argument attributed to Shopkit, with no documentary evidence, alleging invalidity on the grounds of lack of inventive step.

4. In its observations, Shopkit provides a fuller argument, alleging obviousness, with the inclusion of documents to support its case. Shopkit does not refer to the requester's version of its case. I take it that this supports my own conclusion that these two arguments are essentially the same, but that Shopkit's observations, using the documents submitted, flesh out the skeleton argument provided by the requester.
5. One point which I feel I need to address is the argument made by the requester, that as the original case examiner must be assumed to have had knowledge of all the information put forward in the argument attributed to Shopkit and did not object to lack of inventive step, then the invention must be valid. I would point out that with the argument actually advanced by Shopkit, further documents were submitted. Thus the present issues cannot be said to have been fully argued during pre-grant proceedings. If they had been, the Patent Office would have refused to consider the request. In the event, I have come to my conclusion based only on the content of the Patent and the submissions and not been influenced by what the thinking of the case examiner may or may not have been.
6. In view of this I feel it is sensible to first consider validity based on the argument advanced by Shopkit, and conditional on the conclusion, to decide whether there is anything else in the requester's statement that needs to be taken into account.

The Patent

7. GB2363891 was filed on 5 April 2000, claiming no earlier priority date. The Patent was granted on 24 December 2003.
8. To summarize, the invention relates to display apparatus wherein a display device having an electrically energized screen is supported between parallel conductive cables or rods, through which low voltage electricity may be supplied to the display device. The electrical supply is connected to the display device *via* conductive supports fixed to the cables or rods. The display housing also contains memory to store display data, which could be moving image data, and a control device

which causes the screen to display the stored image data.

9. The patent sets out no specific problem of prior art which the invention seeks to solve, other than “to provide a more effective way of displaying information in cable display apparatus”.
10. The Patent has only two claims, both independent, including the main claim and an omnibus claim. These claims are set out below. I have adopted the manner of presentation followed by both requester and observer, in attaching references to the individual features of claim 1, to aid identification and avoid confusion.

Claims

Claim 1 *In cable display apparatus comprising a plurality of vertically extending and electrically energized cables,*

- a) *a display device comprising a substantially rectangular casing,*
- b) *an electrically energized screen forming substantially one face of the casing,*
- c) *electronic storage means for storing information,*
- d) *control means for displaying the stored information on the display screen,*
- e) *at least one electrically conductive support element on each side of the casing and insulated therefrom for attachment to the cables, and*
- f) *power supply means connected to the support elements for energizing the screen, the storage means and the control means.*

Claim 2 *In cable display apparatus comprising a plurality of vertically extending and electrically energized cables, a display device substantially as herein described.*

Discussion

11. On Form 17/77 the requester has requested an opinion on validity, which for the purposes of Section 74A relates only to novelty and/or inventive step. Neither requester nor observer refers to the novelty of the claims. Since this issue is not raised, I need not consider it in detail, but note in passing that in the submissions provided, relating to what was known in the art and in the supporting documents, it is plain that there is no disclosure of an apparatus having all of the features required by claim 1 or claim 2. I therefore conclude that these claims are novel, on the evidence supplied.

12. In deciding on inventive step, the approach I shall take is that set out in the well tried procedure set out in *Windsurfing International Inc. v Tabur Marine (Great Britain) Ltd* [1985] RPC 59. This is a four step approach namely:
- (i) identifying the inventive concept embodied in the patent;
 - (ii) imputing to a normally skilled but unimaginative addressee what was common general knowledge in the art at the priority date;
 - (iii) identifying the differences if any between the matter cited and the alleged invention;
 - (iv) deciding whether those differences, viewed without any knowledge of the alleged invention, constituted steps which would have been obvious to the skilled man or whether they required any degree of invention.
13. In assessing the claims, it will also be necessary for me to follow the usual practice of claim construction set down in *Kirin-Amgen Inc v Hoechst Marion Roussel Ltd* [2005] RPC 9, which in summary requires that, I must decide what the skilled addressee would have understood the patentee to have used the language of a claim to mean.

Inventive Step

14. In determining the inventive concept of claim 1 under paragraph 12 (i) above, it is necessary to construe the words of the claim using the practice in paragraph 13 above. The opening part of claim 1 says “*In cable display apparatusa display device...*”. The description on page 1 line 12 clearly states that the term “cable” is to be interpreted as encompassing rods and thus where necessary I shall do so. As mentioned by the observer, the wording here is unusual and might introduce ambiguity into the scope of the claim. This is confirmed in that the requester (the patentee) interprets this as “a display device *for use in cable display apparatus*” (my italics), rather than using the exact words of his claim.
15. I take this to mean, in the accepted manner, “a display apparatus *suitable for a cable display apparatus...*”. That is a display apparatus *per se*, which must however be suitable to be used in a cable display apparatus.
16. The observer acknowledges that this might be one interpretation, but in

fact prefers an interpretation which reads “Cable display apparatus comprising a plurality of vertically extending”. That is, the whole cable display apparatus including the display device.

17. These two interpretations would of course impute slightly different scope to the claim however, since there is no submission that relates to anything other than a display device used in a cable display apparatus, I am of the opinion that this difference does not affect the substance of any consideration that I may have to make. This also appears accepted by Shopkit at the end of its observations. Initially for the purposes of this opinion I will take the broader interpretation used by the requester.
18. In itself, the term “cable display apparatus” is of uncertain scope, however in the context of the claim and in the light of the description, in particular page 1, I am of the opinion that the skilled addressee would understand this to mean an apparatus wherein a display device is mounted on a plurality of vertically extending (in use) cables or rods.
19. The rest of claim 1 uses perfectly clear language and requires no special interpretation. Furthermore all of the remaining features appear to be necessary to the invention. I therefore take the inventive concept of claim 1 to be a display device, suitable for use in a cable display device, comprising all of the features (a) to (f) of claim 1.
20. The second step in the Windsurfing approach is to identify what the skilled addressee would have been aware of at the priority date of the Patent.
21. The observations set out that at this date, so-called light boxes were well known, these being substantially rectangular casings with a light source mounted behind a sheet e.g. a transparency carrying an image and/or wording. The observation also sets out that it was well known to mount such light boxes on cable display apparatus as defined in claim 1. The requester accepts in his statement that this was the case. I therefore take it that such displays were part of the general knowledge of the art, at the relevant date. I also note that the prior art documents (b) and (c) submitted by the observer, establish that at the priority date of the Patent, it was well known to mount and supply display devices by conductive supports attached to the cables. Document (a), although showing lighting mounted on cables, gives no indication of how electrical supply is provided and thus does not add anything of significance.
22. Both requester and observer also accept that personal computers including a display screen, storage and display controller which could be used to display stored information, were well known at the priority

date of the Patent. This would be hard to dispute and I take this also to be part of the general knowledge of the skilled addressee.

23. This view of at least part of the general knowledge known to the skilled addressee, I believe gives some indication who the skilled addressee is, viz. a competent but unimaginative technician skilled in the field of electrical information and advertising displays and having a general knowledge of the uses of personal computers.
24. The question then turns to what are the differences between what was already known at the priority date of the patent, including common general knowledge in the art, and what is required by the claimed invention.
25. Both requester (the patentee) and the observer accept that generally rectangular display devices (light boxes) were well known. As I have set out above, it was also common knowledge that electrical supply to such boxes could be provided via conductive mounting elements fixed to the cables. I therefore agree with both, that parts (a), (b) and (f) of claim 1, of either interpretation, was known at the priority date of the Patent.
26. It seems clear to me therefore that the difference between the prior art and claim 1, lies wholly in the nature of the display device. Known arrangements have an illuminated replaceable card or transparency, the invention requires the casing to have an electrically energized screen, electronic information store, a controller for displaying the information on the screen and a power supply means energized from the cables via the conductive mounts.
27. The final question to be addressed in determining whether an inventive step is present therefore resolves to decide, without hindsight, whether the replacement of the known type of display device by the claimed type of display device would have been obvious to the skilled addressee.
28. Shopkit's argument on this point is that the prior art has obvious deficiencies, in that the displays in cable display apparatus were static and that it would be desirable to have moving images which can be changed "either selectively or automatically". I note here that the prior art light boxes would allow the image to be changed manually (i.e. selectively), although no evidence has been provided that they were known to be changeable automatically.
29. The requester on the other hand argues that the invention lies in having the idea of providing an electronic display rather than the known light

box. He justifies this view by pointing out that, as accepted by both sides, all the technical elements were well known, but nobody in the art had thought of combining them to produce the invention, and that this very familiarity was a psychological block to the possibility of combination.

30. I am not minded to accept this argument. Although I accept this is a subjective judgement, it is my opinion that at the priority date of the Patent, it would have been widely held in the world of information display, in particular advertising, that moving images were well known as have a higher impact than static images and thus highly desirable in the mind of the skilled addressee. I therefore do not agree that an inventive step lies merely in the idea of providing a display unit for a cable display apparatus which could show moving images. However, even if I am wrong in this respect, I do not think this affects my overall opinion, as explained below.
31. Going forward on the premise that the mere idea of having a new kind of display device in cable display apparatus is not in itself inventive, that is not the end of the matter. It must be shown that the implementation of that idea involves no technical inventive ingenuity on the part of the skilled addressee.
32. Both parties here focus on the use of the well known personal computer to provide the new display. However, the description in the Patent does not specifically state that the embodiment uses a computer as the display. It therefore covers the use of a dedicated display device. Such a device requires no more than an electrically energized screen, "such as LCD, LED", a storage unit e.g. "semiconductor storage unit" and a power supply which "receives 12 v AC power.....and, rectifies, regulates, and if necessary transforms it up...". Nothing else is required of the display device. There is no evidence submitted that such display devices were in themselves well known in this art at the priority date of the Patent, therefore I am not able to say that such devices were part of common knowledge in the art. I therefore conclude that the idea of using such a display device would require an imaginative, inventive input and thus would constitute an inventive step. From this perspective claim 1 is not obvious.
33. Notwithstanding the above conclusion, the invention would still lack an inventive step, if the use of a personal computer as the display device was obvious in itself.
34. Shopkit states (and it is accepted by the patentee) that the use of a personal computer as a display device was well known at the priority date, and that for its use in this context, "No inventive activity would

therefore be required” (this not being accepted by the patentee). However, the invention requires more than this. A personal computer would have elements (b) – (d) of claim 1, but must also have (e) and (f). Personal computers have internal power supplies for energizing the screen, storage and control means (processor). This power supply has also to be connected to the electrically conductive support elements. Although the claim does not specifically say so, I believe the skilled addressee would understand this as meaning the display power supply is electrically energized by connection to the energized cables via these conductive elements. Further, (e) requires the conductive elements to be on each side of the display casing “for attachment” to the cables, which the skilled addressee would understand as providing physical support and the electrical connection.

35. Thus to use a personal computer as the display device of the invention, would require modification of the casing to fit the conductive support elements, modification of the internal power supply of the computer to connect to the conductive support elements and possibly modification of the internal power supply to receive the particular voltage of the energized cables. Such a use would also waste the powerful processing capability of a personal computer, which would be restricted to a single straightforward task. In my opinion these factors would deter the skilled addressee from attempting this solution.
36. It might also be argued that a display device using a personal computer could be devised by providing a separate casing mounted on the cables by conductive support elements, with a personal computer placed inside and electrically connected to the conducting supports. This would avoid the need for modifications to the computer casing, but still leaves the other disadvantages, along with extra drawbacks of mounting its screen to be integral with one face of the casing and increased size and weight, which I judge to be important in this context.
37. I therefore conclude that even if it is considered obvious to replace the known static displays of existing light boxes with electronic displays, the solution of using a personal computer in the manner required by the invention, would not have been an obvious choice to the skilled addressee. Neither, in the absence of any evidence that such displays were well known, would it have been obvious to use a specially constructed dedicated display having the properties required by the invention, without exercising inventive input. I thus find that, on the evidence supplied, claim 1, when interpreted in the broader sense set out above (paragraph 17) includes an inventive step.
38. Since I find this in relation to the broader interpretation of claim 1, I do not need to consider the narrower interpretation, since that must

involve the same inventive step.

39. Although claim 2 is independent of claim 1, as an omnibus claim it clearly requires all of the features of claim 1, which I have found is inventive. I therefore conclude that claim 2 is also inventive.

Opinion

40. I conclude that claims 1 and 2 of the patent involve an inventive step over the documents and arguments submitted by the requester and observer.

NOTE

This opinion is not based on the outcome of fully litigated proceedings. Rather, it is based on whatever material the persons requesting the opinion and filing observations have chosen to put before the Patent Office.

John Betts
Examiner