Patents Act 1977 **Opinion Number** **08/19**

OPINION UNDER SECTION 74A

Patent	GB2357680
Proprietor(s)	D4T4 Solutions Limited
Exclusive Licensee	
Requester	UserReplay Limited
Observer(s)	D4T4 Solutions Limited
Date Opinion issued	11 July 2019

The request

1. The comptroller has been requested to issue an opinion as to whether GB2357680, the Patent, is valid in the light of two prior art documents WO00/03323 and US5809250. This request, filed by Hepworth Browne Limited on behalf UserReplay Limited, followed shortly after a separate request on a parallel application GB2357679, for an opinion which was given the number 06/19. Both cases are divisionals from GB2356783.

2. Cleveland Scott York have provided observations on behalf of D4T4 Solutions Limited, and that prompted observations in reply to be filed by Hepworth Browne for UserReplay Limited. I note that those observations included a copy of US2017/0134248, a document published well after the relevant dates for this application, and I shall not need to consider this document.

The Patent

3. The Patent was filed on 14 March 2000, as a divisional application and granted on 15 January 2002. The Patent relates to a way of monitoring user interaction with interactive content received from the network. In practice, this is about understanding the user experience by monitoring user activity associated with interactive content of a web page or similar that is visited and loaded onto the user device. As the patent sets out on pages 26 and 27, there are a variety of ways that a user might interact with a page (by for example loading or unloading a document from a window or frame, aborting load, errors, selecting or changing the focus).This information might be used to help design a webpage by looking at the time that it takes for someone to complete a transaction, and where they might be expecting to find interaction points, or where adverts might be placed.

Claim construction

4. There are two independent claims, claims 1 and 8 which relate to method and end user device for the same invention and read:

> 1. *A method of operating an end user communications unit for use in a system for monitoring operation of services provided over a network, the communications unit being arranged to allow reception of services provided over the network and the method comprising the steps of monitoring activity, at the communications unit, associated with a service provided over the network and outputting information so obtained and wherein the service is accessed via at least one web, or other electronic, page and the method comprises the further step of identifying the interactive content of a page as the page is visited and loaded into the communications unit*
>
> 8. *An end user communications unit for use in a system of or monitoring operation of services provided over a network, the communications unit being arranged to allow reception of services provided over the network, being arranged to monitor activity associated with a service provided over the network and being arranged to output information so obtained, wherein the. service is accessed via at least one web, or other electronic, page and the communications unit is arranged for identifying the interactive content of a page as the page is visited and loaded into the communications unit.*

5. In their observations, D4T4 Solution Limited emphasise the importance of understanding what the claim requires in terms of the monitoring activity being carried out at the communications unit. However, there does not appear to be any particular concern in the request, observations or observations in reply that there is any difficulty in construing the claim in the light of the description and drawings as instructed by Section 125(1). In doing so I must interpret the claims in context through the eyes of the person skilled in the art. Ultimately the question is what the person skilled in the art would have understood the patentee to be using the language of the claims to mean. This approach has been confirmed in the recent decisions of the High Court in Generics UK Ltd (t/a Mylan) v Yeda Research and Development Co. Ltd & Anor [2017] EWHC 2629 (Pat) and the Court of Appeal in Actavis Group & Ors v ICOS Corp & Eli Lilly & Co. [2017] EWCA Civ 1671.

6. In this case, UserReplay in their observations in reply suggest that the skilled person should be taken to be a team including a software systems analyst and a commercial manager of a web-based business. Quite apart from the question of whether using a team complicates the question of what the skilled person might know, or who might be expected to do what, it is not completely clear to me that the role of a business manager would be in this team. D4T4 Solutions Limited suggest that the skilled person should be taken as an engineer involved in designing systems for the monitoring or web services. A suggestion that I agree appears appropriate.

7. So, what do the independent claims require, they require that the communications unit can monitor activity in relation to services provided to it over a network, where that service is a web (or other electronic) page so that the interactive content of a

page can be identified as it is visited and loaded into the communications unit. In practice, the prior art noted in the request, and the main embodiment here relates to web pages, so I shall not need to consider what other electronic pages might amount to.

8. The main point of contention surrounds what the meaning of the communications unit being "suitable for" and "arranged" for a monitoring step might be. It is true to say that the term "for" is not fully limiting. However, I must look at the context. The opening part of the application set out on page 1 lines 20-22 suggests that existing systems tend to provide generalised information by monitoring networks and servers, suggesting that the Patent intends to take a different approach.

9. In claim 8 it is stated that "the communications unit is arranged for." Given that in the description, the embodiments relate to an applet on the communications, I do not think that it is fair to suggest that this implies that the communications unit may simply be arranged to communicate with another unit to gather that information at a server for example. In claim 1, the clause that monitoring activity is carried out at the communications unit, is separated from a further step where the interactive content of a page is identified. That potentially creates greater scope for the argument. However, I do not see a point in the description where the skilled person is lead towards taking anything other than the straightforward approach to the claims, in that the embodiments relate to the communications unit providing that step, in the applet. That means I do not think that he is led to look for an alternate, where the claim might cover a server providing that function. I therefore believe both independent claims therefore require that identification of interactive content takes place at the communications unit.

10. On a final point of construction, UserReplay Limited point me to page 7 lines 8-16, where it is suggested that interactive content is identified, and an example appears to be a button which can be "pressed" by a user and a field allowing input of text. As D4TD solutions Limited suggest, this might be useful for analysing the user's interaction with those interactive content elements, but that analysis of user interaction is not a requirement of the independent claims. UserReplay Limited in their observations in reply, suggest that interactive content such as buttons and text entry is an inherent part of a web page. That might be true of some or most web pages, but it is possible to provide a text only web page. The context of the Patent is in monitoring the user's interaction with a page, so I think that requires something more than reading text. To me it matters to the designer when the user has a choice of options on how to interact with a web page, rather than for example just the speed at which they read, and therefore scroll through text, that those choices are presented at appropriate places. I therefore see the interactive feature as being a substantive limitation, albeit one that could be simply implemented with a <button> tag, radio buttons or text input in html, or in other more complicated ways. The claim therefore requires identification of those features within a page.

11. There is one further point I take out of this passage on page 7. The intention is to understand the context of a user's interaction with specific parts of the webpage. That means that I do not consider the task of rendering a webpage, which of course takes account of interactive content, such as a button, is the intended task of this further step at the end of the claim. I consider the identification of interactive content to be used in the monitoring activity.

12. Taking a step back, of course at the time of application, it would have been well established that a user's browser would have recorded their history of links selected, so I am reassured that this construction avoids suggesting that the claim reads onto that.

The Prior Art

13. The request notes two pieces of prior art. The first WO00/03323 (Wenig) relates to a method of auditing network applications, where an auditing detection filter detects and stores each request from the client and response form the server. This information can be used to visually recreate a user session and analyse the events that occurred in it. The requester provides a translation of this document, and there has been no suggestion in the observations that this translation is incorrect.

14. The second US5809250 (Kisor) relates to a method of using a session file to provide protocol calls to a user's local browser to replay a recorded browsing session as edited or annotated.

15. The requester provides a mapping of different parts of both documents onto the claims. It therefore suggests that they lack novelty and/or inventive step. It is however, worth noting that in that mapping UserReplay Limited acknowledge that the code location is different to that in the prior art, in that Wenig monitors activity centrally. Whilst they suggest that this difference might be trivial change to Wenig, this means that their attack must rely on inventive step.

16. In their observations D4T4 Limited assert that Wenig does not provide for monitoring at the client device, and therefore argue that the Patent is novel and inventive.

17. In relation to Kisor, UserReplay Limited point to column 2 lines 23-27 and column 8 lines 42-44 to show that the user section is played back, including different forms of content (text, graphics and video). They also point to passages relating to figure 2, which suggest that a user can decide when to start or stop recording of a browsing session. UserReplay Limited also note the reference in column 9 lines 35-39 where the scrolling of a page may be recorded in order to ensure correct replay of user experience.

18. D4T4 Solutions Limited suggest that none of this amounts to monitoring the interactive content as it is loaded. In my view, it is the scrolling which gets closest, but this is not in my view monitoring how the user interacts with "interactive content of a page" – as required by the claim. It might be a function of the browser and settings used, rather than interaction with the webpage itself. I therefore agree that Kisor does not anticipate the Patent.

19. To determine whether an invention defined in a particular claim is inventive over the prior art, I will rely on the principles established in Pozzoli SPA v BDMO SA [2007] EWCA Civ 588:

> *(1)(a) Identify the notional "person skilled in the art";*
> *(1)(b) Identify the relevant common general knowledge of that person;*
> *(2) Identify the inventive concept of the claim in question or if that cannot*

readily be done, construe it;
(3) Identify what, if any, differences exist between the matter cited as forming part of the "state of the art" and the inventive concept of the claim or the claim as construed;
(4) Viewed without any knowledge of the alleged invention as claimed, determine whether those differences constitute steps which would have been obvious to the person skilled in the art.

20. As I have set out above, I have taken the skilled person to be an engineer involved in designing systems for the monitoring or web services. I take it that they will be well aware of different ways to include interactive content within a webpage.

21. In respect of the Wenig document, the identified difference is the location of the monitoring. UserReplay Limited set out the argument in their observations in reply that the skilled person is left "only" to decide where to locate the software needed to produce a potentially more detailed picture of mouse movements. Whilst it might be argued that if the skilled person needs to collect more detailed information on mouse tracking, the skilled person may be drawn to collect that information on the device. That is not enough also to suggest that the skilled person would also then seek to monitor which content was interactive at the device. There might or might not be further advantages and complications in doing that, such as transferring load from the network to the client. UserReplay Limited go no further that asserting that knowing that mouse movement is client based, would logically ensure that [all] tracking and reporting software would be placed on the client device. Given that I have not been presented with any evidence on what the technical bias for or against such a decision might be, I am therefore reluctant to conclude that the skilled man would be led to conduct client-based analysis of interactive content of a page.

22. I turn then to the Kisor document. Here, the identified difference relates to the monitoring of identified interactive content of a page. As I have noted above, there does not appear to be any special significance placed in Kisor on identifying particular content as interactive. UserReplay Limited provide no argument for why the skilled person would adapt Kisor in this way in their analysis of this document, nor is it clear to me that the skilled person is led to do so. I therefore conclude that the Patent is not obvious in the light of Kisor.

23. There is one further argument that I should consider, and that relates to the question of a combination of Kisor with Wenig. This argument is set out in the observations in reply by UserReplay Limited. In that argument, they suggest that a combination is obvious because the two documents are closely related. I take that to be a suggestion that they relate to similar technology, rather than a suggestion that one document points to the other in some way. D4T4 Solutions Limited in their observations dispute the legal basis for this argument and suggest that the combination does not provide the necessary functionality, meaning a new implementation on the device, to take account of interactive content would be required. In my view, there is no clear direction in either document to seek the solution provided in the other, either because it refers to the other, or to a clear class of such documents (such as in *Pfizer Ltd's Patent* [2001] FSR 16.) I do not therefore agree that the combination is one that renders claims 1 or 8 obvious.

24. Having concluded that the independent claims are inventive in relation to the

documents raised in this request, I shall not need to go on to consider the dependent claims.

Opinion

25. As a result, it is my view that the Patent, GB 2357680 is novel and inventive in respect of the prior art US5809250 and WO00/03323 raised in this request.

Application for review

26. Under section 74B and rule 98, the proprietor may, within three months of the date of issue of this opinion, apply to the comptroller for a review of the opinion.

Robert Shorthouse
Examiner

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 Office.