



26 January 2012

**PATENTS ACT 1977**

APPLICANT Enabled London Limited

ISSUE Whether patent application number  
GB 0821244.1 complies with section 1(2)

HEARING OFFICER Dr. S. Brown

---

**DECISION**

**Introduction**

- 1 This decision concerns the issue of whether the invention claimed in UK patent application GB 0821244.1 relates to non-excluded subject matter as required by section 1(2) of the Act. The application is entitled "Information system" and was lodged on 21<sup>st</sup> November 2008 as a national phase application deriving from the PCT application WO 2007/125370 A1, and subsequently published as GB2454098 A.
- 2 During the examination process, the examiner reported that the invention defined in the claims was excluded both as a program for a computer and as presentation of information. Despite a number of rounds of amendments the applicants and the examiner were unable to resolve this issue and a hearing was therefore held on 8<sup>th</sup> December 2011. The applicants were represented by Mr. Ben Snipe of Snipe Chandrasesan LLP. Mr. Charles Jarman, acting as the Hearing Assistant, and Mr. Jake Collins, the examiner for the application, also attended.

**Decision in Brief**

- 3 Following the Aerotel test, the contribution in this case can be identified as a system within which web pages can be automatically adapted to provide links from predetermined words to additional material stored on a database which can be accessed if a user chooses to do so.
- 4 I consider that, unlike in Symbian, this contribution does not overcome a problem which lies within the computer itself, nor within the wider computer network. This conclusion is reinforced when the signposts in *AT&T* are considered. I am forced to conclude that the contribution consists only of excluded subject matter and does not have a relevant technical effect. **It fails the Aerotel test as no more than a program for a computer as such and, so far as it is not a program for a computer, as the presentation of information as such.** I can see nothing

that could be reasonably expected to form the basis of a valid claim and therefore refuse the application under section 18(3). The applicants may appeal within 28 days. I will now explain my decision in more detail:

## **The Application**

5 The primary claims I was asked to consider at the hearing were filed on 8<sup>th</sup> September 2011. There are 28 claims in total comprising 2 independent claims (claims 1 and 18) which relate respectively to a system for adapting electronically viewable web pages including text and a method of adapting electronically displayed data. The claims read:

*1. A system for adapting electronically viewable web pages including text, comprising:  
a device for download of web pages from website providers and for viewing of content by a user;  
a server for storing a database storing a plurality of words and/or phrases and, for each word or phrase on the database, an appropriate definition, translation or transliteration and/or other multimedia content;  
a plurality of website providers each storing web pages, wherein the database is stored remotely from the web pages, wherein the web pages include a list of words and/or phrases in the database and address information required to access each word and/or phrase, and wherein each website provider has a script for pulling the list from the server, together with the address information;  
wherein the server is configured to enable the list and address information to be pulled,  
wherein the device is configured to use means for comparing the web pages with the list and, when a word or phrase from the list is found, making a link which associates the word or phrase of the web page which corresponds to the word or phrase of the database with the appropriate definition, translation, transliteration and/or multimedia content, and modifying the display of that word or phrase to indicate the link, whereby performing an appropriate action on that word or phrase as displayed by the device causes the definition, translation or transliteration and/or multimedia content to be downloaded to the device and displayed to the viewer.*

*18. A method of adapting electronically displayed data comprising:  
pulling by a website provider a list of a plurality of words and/or phrases held on a database at a server, together with address information required to access each word or phrase, wherein the server is configured to enable the list, together with address information required to access each word or phrase, to be pulled, and wherein the database is stored remotely from the web pages provided by said website provider;  
downloading, by a device, web pages from a website provider, wherein the web pages include the list of words and/or phrases and the address information;  
comparing, at the device, the web pages with the list;*

*associating words and/or phrases of the web pages which correspond with ones of the list with links to an appropriate definition, translation, transliteration and/or multimedia content stored in the database at a server, so that said words and/or phrases are marked in situ to visually indicate that the definitions, translation, transliterations, and/or multimedia content are available; and presenting, by the device, the marked page to the person, whereby by performing a particular action in the vicinity of the word or phrase as displayed, the device downloads and the person is presented with the corresponding definition, translation, transliteration and/or multimedia content.*

- 6 Two further sets of claims were subsequently filed during the hearing process, but were filed more than two months after the compliance date, which was not extended. As such these claims cannot be considered to have been filed within the required timescale and hence are not eligible for consideration. However, for the sake of completeness and to help illuminate where the applicants believe the invention may lie, I will set out these claims below.
- 7 The 'main' set of additional claims comprise 38 claims in total and includes four independent claims, claims 1, 24, 35 and 36, which read as follows:

*1. A system for adapting electronically viewable content including text, comprising:  
a database storing a plurality of words and/or phrases and, for each word or phrase in the database, an appropriate definition, translation or transliteration and/or multimedia content; and  
means for comparing [sic] the content with the database and, when a word or phrase is found, making a link which associates the word or phrase of the content which corresponds to the word or phrase of the database with the appropriate definition, translation, transliteration and/or multimedia content, and modifying the display of that word or phrase to indicate the link, whereby performing an appropriate action on that word or phrase as displayed causes the definition, translation or transliteration and/or multimedia content to be displayed to the viewer.*

*24. A method of adapting electronically displayed data comprising:  
providing a database including a plurality of words or phrases, each being associated with a definition, translation, transliteration and/or multimedia content;  
comparing the original data with the database;  
associating words and/or phrases of the original data which correspond with ones of the database with links to the appropriate definition, translation and/or multimedia content, and marking said words and/or phrases in situ to visually indicate that the definitions, translations, transliterations and/or multimedia content are available; and  
presenting the marked page to the person, whereby performing a particular action in the vicinity of that word or phrase as displayed, the person is presented with the definition, translation transliteration and/or multimedia content.*

*35. A device for download from website providers of electronically viewable web pages including text, a list of words and/or phrases and address information required to access each word and/or phrase, and for adapting the web pages, wherein for each word and/or phrase on the list, an appropriate definition, translation or transliteration and/or multimedia content is stored on a database, and wherein the device is configured to use:*

*means for comparing the text with the list and, when a word or phrase from the list is found, making a link which associates the word or phrase of the web page which corresponds to the word or phrase of the list with the appropriate definition, translation, transliteration and/or multimedia content, and modifying the display of that word or phrase to indicate the link, whereby performing an appropriate action on that word or phrase as displayed causes the definition, translation, transliteration and/or multimedia content to be displayed to the viewer.*

*36. A website provider storing web pages for download by devices, wherein the web pages each include:*

*a list of words and/or phrases corresponding to word and/or phrases in a database, wherein for each word or phrase in the database, the database includes an appropriate definition, translation or transliteration and/or other multimedia content, and*

*address information required to access each word and/or phrase, a script executable by a device for comparing text in the webpage with the list of words and/or phrases, and, when a word or phrase from the list is found, making a link which associates the word or phrase with the appropriate definition, translation, transliteration and/or multimedia content in the database, and modifying the display of that word or phrase to indicate a link, whereby performing an appropriate action on that word or phrase as displayed causes the definition, translation or transliteration and/or multimedia content to be displayed to the viewer.*

- 8 The second, 'auxiliary request' set of additional claims comprise 35 claims in total of which claims 1 and 22 are independent and once again relate to a system for adapting electronically viewable web pages including text and a method of adapting electronically displayed data, respectively. The independent claims read as follows:

*1. A system for adapting electronically viewable web pages including text, comprising:*

*a device for download of web pages from website providers and for viewing of content by a user;*

*a server storing a plurality of words and/or phrases and, for each word or phrase on the database, an appropriate definition, translation or transliteration and/or multimedia content;*

*a website provider storing web pages, wherein the web pages comprise a list of words and/or phrases in the database and address information required to access each word and/or phrase, and wherein the database is stored remotely from the website provider, and;*

*wherein the device is configured to use means for comparing the web pages with the list and, when a word or phrase from the database is found, making a link using the address information, which associates the word or phrase with the appropriate definition, translation, transliteration and/or multimedia content, and modifying the display of that word or phrase to indicate the link, whereby performing an appropriate action on that word or phrase as displayed causes the definition, translation or transliteration and/or multimedia content to be downloaded to the device and displayed to the viewer.*

*22. A method of adapting electronically displayed data comprising: downloading, by a device, web pages from a website provider with a list of words and/or phrases and address information required to access each word or phrase; comparing the web pages with the list; associating words and/or phrases of the websites which correspond with ones of the list with links to the appropriate definition, translation and/or multimedia content using the address information, so that said words and/or phrases are marked in situ to visually indicate that the definitions, translations, transliterations and/or multimedia content are available; and presenting the marked page to the person on the device, whereby by performing a particular action in the vicinity of that word or phrase as displayed, the device downloads and the person is presented with the appropriate definition, translation transliteration and/or multimedia content.*

- 9 In my view, there is little meaningful difference in the substance of these differing claims such that the issues and arguments before me are equally applicable to the primary set of claims and to both sets of additional claims, irrespective of whether or not said claims can be considered to have been filed in a timely manner. Thus, while only the primary set of claims will be considered in detail, the following discussion can be considered to relate equally to all sets.

### **The law and its interpretation**

- 10 Section 1(2) of the Patents Act reads:

*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:*

*...*

*...*

*(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.*

- 11 In addition to the above there is also the equivalent section of the EPC, article 52(2), to consider, though it is accepted that I am bound to follow the precedent set by the UK courts and treat EPO practice only as persuasive. In considering this application I will therefore follow the case law established in the UK in *Aerotel*<sup>1</sup>, and further elaborated in *Symbian*<sup>2</sup> and *AT&T*<sup>3</sup>.
- 12 In *Aerotel* the Court of Appeal approved a four-step test for the assessment of patentability, namely:
- 1) Properly construe the claim
  - 2) Identify the actual (or alleged) contribution
  - 3) Ask whether it falls solely within the excluded matter
  - 4) Check whether the contribution is actually technical in nature.
- 13 The operation of the test is explained at paragraphs 40-48 of the judgment. Paragraph 43 confirms that identification of the contribution is essentially a matter of determining what it is the inventor has really added to human knowledge, and involves looking at substance, not form. Paragraph 47 adds that a contribution which consists solely of excluded matter will not count as a technical contribution.

### **Application of the Aerotel test**

#### Properly construe the claim

- 14 I do not think that any particular problems arise over the construction of the main set of claims. In essence they relate to a system for adapting electronically viewable web pages which include text, wherein a user operated device can be used to download web pages from a website provider, said web pages including a list of words and/or phrases and associated address information which can be used to access alternative or explanatory information held in a database stored on a server remote from the website provider. The list for a webpage is obtained by the web page provider from the server for inclusion with the web page prior to its download by the user operated device. The user operated device is configured to compare the list with the content of the webpage and, when a word/phrase on the list is found on an associated webpage, to create a link from said word/phrase to the alternative or explanatory information on the database and provide a visual indication that the link is available. If a user then performs a particular action, such a mouse 'click', in the vicinity of the word/phrase then the alternative or explanatory information is downloaded and displayed on the user operated device.

---

<sup>1</sup> *Aerotel Ltd v Telco Holdings Ltd (and others) and Macrossan's Application* [2006] EWCA Civ 1371

<sup>2</sup> *Symbian Limited's Application* [2008] EWCA Civ 1066

<sup>3</sup> *AT&T Knowledge Ventures LP and CVON Innovations Limited* [2009] EWHC 343 (Pat)

### Identify the contribution

- 15 The description explains that one reason for providing the alternative, or explanatory, information is to make web pages more easily understood by particular groups of users, for example by people with learning difficulties. Mr. Snipe referred to this embodiment to illustrate his argument that the contribution is a way of enabling better access to information on a webpage.
- 16 In contrast, in his reports the examiner argued that the contribution was the automatic adaptation of web pages through the addition of links from words or phrases in the web pages to centrally stored further information, such as a definition.
- 17 On balance, I believe that the Mr. Snipe's view of the contribution is a little too broad. In my opinion what has actually been contributed to the sum of human knowledge is a system within which web pages can be automatically adapted to provide links from predetermined words to additional material stored on a database. I will, however, return to comment further on Mr. Snipe's view of the contribution at a later stage.

### Ask whether it falls solely within the excluded matter

- 18 Having identified the contribution, I must now consider whether or not the contribution resides wholly within the excluded matter exclusions, namely whether the contribution relates purely to a computer program and/or to presentation of information as such.
- 19 There is no doubt, when considering the application as a whole, that the contribution is delivered wholly by software running on conventional computing devices in a conventional network, and I do not believe that there is any dispute on this point. I must firstly therefore ask: 'is it more than a program for a computer as such?'
- 20 When considering whether or not the invention makes a technical contribution beyond that of a computer program as such, it is useful to consider the 'signposts' as set out by Lewison J in *AT&T*<sup>3</sup>, which states in paragraphs 40-41:

*[40] As Lord Neuberger pointed out, it is impossible to define the meaning of "technical effect" in this context, but it seems to me that useful signposts to a relevant technical effect are:*

*i) whether the claimed technical effect has a technical effect on a process which is carried on outside the computer;*

*ii) whether the claimed technical effect operates at the level of the architecture of the computer; that is to say whether the effect is produced irrespective of the data being processed or the applications being run;*

*iii) whether the claimed technical effect results in the computer being made*

*to operate in a new way;*

*iv) whether there is an increase in the speed or reliability of the computer;*

*v) whether the perceived problem is overcome by the claimed invention as opposed to merely being circumvented.*

*[41] If there is a technical effect in this sense, it is still necessary to consider whether the claimed technical effect lies solely in excluded matter.*

21 At the hearing Mr. Snipe did not dispute that signposts (ii), (iii) & (iv) were not relevant in this case and on this point I agree. None of the contributions identified above affect the operation of the computer itself.

22 I note that during the prosecution of the application it had been argued that the system acts to reduce the bandwidth requirements on the network but I must agree with the examiner's view of this matter – the system does not so much reduce the bandwidth requirements as redistribute the load, effectively spreading the load which would have been placed purely on the web page provider between the web page provider and the server upon which the database is located. It was also argued that the system required less processing capacity from the user operated device but again I must agree with the examiner that such an efficiency does not, in itself, constitute a technical effect. This view is supported by the decision in *Raytheon*<sup>4</sup> where in paragraph 37 Kitchin J states:

*The result is a computer of a known type operating according to a new program, albeit one which reduces the load on the processor and makes an economical use of the computer memory. I agree with the Hearing Officer that this aspect of the contribution relates to a computer program as such.*

23 With regard to signpost (i), Mr. Snipe argued that the invention acted to provide further information to a user and that such a provision was by its nature outside the realm of the computer. I am afraid I am not persuaded by this argument. I do not believe that said provision of further information, which in reality is a change in what is displayed on the screen of the user operated device, can be considered a 'technical effect on a process which is carried on outside the computer' in the sense intended in *AT&T*<sup>3</sup>. I find support for this view in *Gemstar*<sup>5</sup> where in paragraph 50 Mann J states:

*The technical effect relied on by Gemstar is a better interface, or a different interface if 'better' is not relevant. That is an abstract concept. It does not in terms describe some physical activity or effect. There is a different display on the screen, but that is not enough, in my view. That is still part of the computer program and is not an external effect (Mr Birss did not rely on any internal effect). Many computers running a program are*

---

<sup>4</sup> *Raytheon Company v The Comptroller General of Patents, Designs and Trade Marks* [2007] EWHC 1230 (Pat)

<sup>5</sup> *Gemstar-TV Guide International Inc v Virgin Media Ltd* [2009] EWHC 3068 (Ch)



*likely to have a display output, and if that were enough to be a technical effect then every program in such a computer would be likely to fall outside the exclusion, which is unlikely to have been the intention of the draftsman of the Act. A different display to that shown before does not seem to me to go far enough to amount to a technical effect which makes a difference.*

- 24 I do not therefore believe that consideration of signpost (i) can lead one to conclude that the invention relates to more than a computer program as such.
- 25 With regard to signpost (v), it was argued during the hearing, and indeed has been maintained since the outset of the application, that the problem being addressed is that of providing information in a way which is appropriate to the user. In particular the invention addresses the provision of information for people with learning difficulties or other groups such as the elderly. The problem is thus 'inappropriate' information, or information in an inappropriate format, which the invention overcomes by providing access to an extra set of information. I believe the wording of signpost (v) does invite a broader interpretation of what the contribution might comprise such that we can potentially consider this provision of extra information, or better access thereto, as overcoming the above stated problem and not merely circumventing it.
- 26 However, even if I accept that the invention does successfully overcome this problem I must then go on to consider the proviso to the signposts, as set out in paragraph 41 of *AT&T*<sup>3</sup> which I have already detailed above, i.e. I must consider whether the contribution which enables the problem to be overcome lies solely in excluded matter. The problem, inappropriate information, is overcome through the provision of more appropriate information, with the system facilitating the ability to choose what further information is provided and how it is provided. It was made clear in *Autonomy*<sup>6</sup> that choosing where and how to display information must be considered to be presentation of information as it is part of the decision as to how to present the information.
- 27 It does not help that the information provided is 'better' or more appropriate for the end user. In this regard, I again find support in *Gemstar*<sup>5</sup>, in which Mann J states in another section of paragraph 50:

*The fact that what the user perceives and interacts with is 'better' does not make the advance technical at all.*

- 28 In summary, if I accept that signpost (v) indicates that there is a contribution beyond being a computer program as such, then it must lie in choosing what further information should be provided and how and when it can be displayed. However, the courts have been clear that such a contribution must be considered to fall within the field of presentation of information. Thus, if there is any contribution beyond being a computer program as such, and I'm not wholly convinced that there is, it can only lie within the equally excluded field of presentation of information.

---

<sup>6</sup> *Autonomy Corp Ltd v Comptroller General of Patents, Trade Marks & Designs* [2008] EWHC 146 (Pat)

29 Mr. Snipe also drew my attention to the decision in *Protecting Kids The World Over (PKTWO)*<sup>7</sup>. He argued that this case was analogous to *PKTWO*<sup>7</sup> as both enable better access to information on the web. I do not find this argument persuasive though, as the key point within the *PKTWO*<sup>7</sup> decision was that the contribution of the invention, when viewed holistically, was to provide an improved monitoring system for electronic communication which acted, when appropriate, to generate an alarm to alert a user at a remote terminal. It was this real world effect, essentially the provision of a better alarm system, which provided the key technical contribution outside of the computer itself. At paragraph 34 of the *PKTWO*<sup>7</sup> decision Floyd J. explicitly distinguishes this effect from a system where information is merely displayed on a screen such as is the case in the present application:

*I start with the proposition that the generation and transmission of an alert notification to the user/administrator is not a relevant technical process. I accept that in many cases this may be correct. Plainly it was correct in the case of two out of the three patents considered by Mann J in Gemstar, where information was simply displayed on a screen. But what is in play in the present case, namely an alarm alerting the user, at a remote terminal such as a mobile device, to the fact that inappropriate content is being processed within the computer, is in my judgment qualitatively different. First of all, the concept, although relating to the content of electronic communications, is undoubtedly a physical one rather than an abstract one. In that respect it was more akin to the third of the three patents considered by Mann J in Gemstar. Secondly, the contribution of claim 33 does not simply produce a different display, or merely rely on the output of the computer and its effect on the user. The effect here, viewed as a whole, is an improved monitoring of the content of electronic communications. The monitoring is said to be technically superior to that produced by the prior art. That seems to me to have the necessary characteristics of a technical contribution outside the computer itself.*

30 The decision in *Autonomy*<sup>6</sup>, as noted previously, was also discussed at the hearing. Mr. Snipe argued that the current invention could be distinguished from that decision as it provides links to predetermined information rather than to 'random' search results, as was the case in *Autonomy*<sup>6</sup>. However, I cannot find this argument persuasive as this simply boils down to a choice of what information is to be presented which, as has been noted above, must still be considered to constitute the presentation of information, as such.

31 Finally, it has been established in the courts that an invention is still unpatentable if its' contribution is no more than a combination of two or more different statutory exclusions. For example, in paragraph 60 of *Gemstar*<sup>5</sup> Mann J states:

*I therefore find that, so far as the single channel element of the Single Channel patent is not a computer program as such, it is excluded from patentability as a presentation of information. It is established on the*

---

<sup>7</sup> *Protecting Kids The World Over (PKTWO) Limited* [2011] EWHC 2720 (Pat)

*authorities that an invention can be unpatentable as a result of a combination of two or more of the statutory exclusions - see for example Raytheon. In the further alternative that mixture applies to the present case – there is a mixture of computer programmes and a presentation of information.*

- 32 I believe that the same situation arises in this case - the invention, in so far as it is not a program for a computer, can only be viewed as relating to the presentation of information. It thus fails the third Aerotel step as some combination of a program for a computer as such and the presentation of information as such.
- 33 I am afraid that this conclusion does not change when considering the two additional sets of claims. All of the above reasoning applies equally to them.

Check whether the contribution is actually technical in nature

- 34 As reasoned above, the contribution lies wholly within excluded matter and therefore does not have a relevant technical effect. Thus the application also fails the fourth Aerotel step.

**Decision**

- 35 I have found that contributions made by the invention defined in the independent claims, both of the primary set of claims and the two additional sets of claims, falls solely in subject matter excluded under section 1(2). I have read the specification carefully and considered the possible amendments suggested by Mr. Snipe during the hearing and I can see nothing that could be reasonably expected to form the basis of a valid claim. I therefore refuse this application under section 18(3).

**Appeal**

- 36 Under the Practice Direction to Part 52 of the Civil Procedure Rules, any appeal must be lodged within 28 days.

**Dr. S. Brown**

Deputy Director acting for the Comptroller