



BL O/078/06

23 March 2006

PATENTS ACT 1977

APPLICANT Overture Services Inc

ISSUE Whether patent application number GB
0218130.3 complies with section 1

HEARING OFFICER P Thorpe

DECISION

Introduction

- 1 Application GB0218130.3 entitled "System and method for enabling multi-element bidding for influencing a position on a search result list generated by a computer network search engine" was filed on 5 August 2002 claiming priority from two United States applications with an earliest date of 3 August 2001. The application was published without having been searched as GB 2381896 on 14 May 2003.
- 2 Throughout the examination process the examiner reported that the invention was excluded from patentability under section 1(2). Despite numerous rounds of correspondence the examiner and applicant have been unable to reach agreement as to the patentability of the invention. In his latest report the examiner observed that it was unlikely that further correspondence would resolve the issue, and invited the applicant to request a hearing. The applicant agreed, and requested that a hearing be appointed. The matter therefore came before me at a hearing¹ on 23 January 2006 at which the applicant was represented by Mr Geoffrey Dallimore of Boulton Wade Tennant.

The invention

- 3 The application concerns a method for enabling information providers using a computer network such as the internet to influence the position of a search listing within a search result list generated by an internet search engine. More specifically the invention seeks to take account of the popularity of specific search listings in a search result list and to engineer a higher placement for more popular listings. By also factoring in the amount an advertiser is prepared to pay for a listing the application also seeks to increase revenue received.

¹ The hearing on this application was held at the same time as the hearing on three other applications filed by Overture Services Inc. These are the subject of decision O/079/06, O/080/06 O/081/06.

- 4 The method also has potential benefits to the searcher which I shall come on to shortly.
- 5 I have produced the following example to shed a little light on how I believe the invention works. Let us assume that an advertiser, "Bloggs Widgets", has a website and has associated search terms (e.g. the word "widgets") to that website. They have agreed to pay (referred to in the application as bidding) 50p to a search engine provider each time their website is clicked on (or as it is referred here clicked-through) after it has been displayed in a search result list.
- 6 The method according to the invention first calculates an intrinsic clickthrough rate (CTR) for each rank in a search result list. The intrinsic CTR represents how often a user clicks-through to a website at a particular rank irrespective of what the website is. So rank 1 ie. top of the list tends to be the most popular and might be clicked-through on say 8 out of 10 searches (80%). Rank 12 is less popular so might only be clicked-through 2 out every 10 searches (20%).
- 7 The method then calculates what the average click-through rate is for Bloggs' website (irrespective of where it appears in a search results list) and what its average rank is. So let us assume the average click-through rate is 3 in every 10 times it is listed (30%) and its average rank (position in the list) is rank 12.
- 8 An expected click-through rate is then calculated for Bloggs website. This equals the intrinsic CTR for the average rank of Bloggs' website (rank 12). So the expected CTR is 20%.
- 9 A bid value is then determined by multiplying the bid amount (50p) by the ratio of the actual CTR for Bloggs (30%) to the expected CTR (20%). The bid value for Bloggs' website is therefore 75p.
- 10 When a search request is received by a searcher entering a keyword, all advertisers associated with that keyword are identified. A bid value for each is calculated as described above and the advertisers' listings are then listed in the results list according to the determined bid values. So Bloggs will appear higher than another advertiser who has a determined bid value of 70p but below one with a determined bid value of 80p.
- 11 The final step is to detect a click-through to the Bloggs website and then charge to Bloggs' account the bid value ie 70p.
- 12 The statement of claim, including the latest amendments filed by the applicant on 23 November 2005 comprises a single claim. This reads as follows:

A method of generating a search result list in response to a search request from a searcher, the method comprising: storing a plurality of search listings, each search listing being associated with an advertiser, a bid amount and a search term, wherein the bid amount is a money amount bid by the advertiser for the search listing;

Calculating for each rank in search result lists generated in response to search requests, an intrinsic click-through rate (CTR) over a plurality of searches;

Calculating for each search listing an actual CTR over a specified period of time and an average rank held over a period of time by the respective search listing in search result lists generated in response to search requests;

Determining for each search listing, an expected CTR equal to the calculated intrinsic CTR for the rank that corresponds with the average rank held by the respective search listing;

Determining bid values for respective search listings by calculating, for each search listing, the product of:

The bid amount for the respective search listing;

And the ratio of the actual CTR for the respective search listing to the expected CTR for the respective search listing;

Receiving a search request from the searcher;

Identifying search listings having a search term generating a match with the received search request;

Ordering the identified search listings in a search result list according to the determined bid values of the respective search listings;

Detecting a click-through by the searcher of one of the ordered search listings;

In response to the click-through, charging the bid value to an account of the advertiser associated with the one search listing.

The Law

- 13 The examiner has reported that the application is excluded under section 1(2) of the Act. The relevant parts of this section read:

1(2) It is hereby declared that the following (among other things) are not inventions for the purposes of this Act, that is to say, anything which consists of -

- (a) a discovery, scientific theory or mathematical method;
- (b)
- (c) a scheme, rule or method for performing a mental act, playing a game or doing business, or a program for a computer;
- (d)

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

- 14 These provisions are designated in section 130(7) as being so framed as to have, as nearly as practicable, the same effect as Article 52 of the European Patent Convention (EPC), to which they correspond. I must therefore also have regard to the decisions of the Boards of Appeal of the European Patent Office (EPO) that have been issued under this Article in deciding whether the present invention is patentable.

Interpretation

- 15 In a Practice Notice² issued on 29 July 2005, the Office explained that it was adopting a new approach to assessing whether an invention relates to unpatentable subject matter. This new approach reflects the approach adopted by Peter Prescott QC sitting as Deputy Judge in his judgment in *CFPH*³. The new approach is a two step approach which can be summarized as follows:

Identify what is the advance in the art that is said to be new and not obvious (and susceptible of industrial application)

Determine whether it is both new and not obvious (and susceptible of industrial application) under the description of an “invention” in the sense of Article 52 of the European Patent convention – which section 1(2) of the Act reflects.

- 16 Once the new and non-obvious advance has been identified, Mr Prescott suggests that it would often be possible to determine whether this was an advance under the description of an invention by asking “Is this a new and non-obvious advance in technology”. However, because of the difficulty sometimes associated in determining what is meant by technology, Mr Prescott says that if there is any doubt in this regard then it will be necessary to have recourse to the terms of Article 52 of the EPC.
- 17 Subsequent judgments issued by the High Court (*Halliburton*⁴, *Shoppalotto*,⁵ *Crawford*⁶ and *RIM v Inpro*⁷) all point to a similar requirement for a technical advance in order to pass the test for patentability.

Mr Dallimore’s submission on the approach that I should take

- 18 Mr Dallimore addressed me at some length at the hearing on the new approach being adopted by the Office. In particular he expressed concern that this approach appeared to be significantly shifting the boundary as to what is and is not patentable. This he believed was especially so in relation to computer programs. Having read some of the Office decisions implementing

² Patent Office Practice Notice: Patents Act 1977: Examining for Patentability” see <http://www.patent.gov.uk/patent/notices/practice/examforpat.htm>

³ *CFPH LLC's Application* [2005] EWHC 1589 Pat

⁴ *Halliburton Energy Services Inc v Smith International (North Sea) Ltd and others* [2006] RPC 25

⁵ *Shoppalotto.com's Application* [2005] EWHC 2416 (Pat)

⁶ *Cecil Lloyd Crawford's Application* [2005] EWHC 2417 (Pat)

⁷ *Research In Motion UK Ltd v Inpro Licensing* [2006] EWHC 70 (Pat)

the new approach he had formed an impression that if an invention resided solely within the operation of a computer then it would not be patentable. If however the invention was using a computer to control something outside of a computer say an industrial process then that could be patentable.

- 19 Mr Dallimore also questioned whether under the new approach the invention that was found to be patentable in *Vicom*⁸ would still be patentable. The *Vicom* decision in his opinion had been strongly affirmed in *Fujitsu*⁹ where support was also to be found for the concept of technical contribution. He also suggested that *CFPH* had also affirmed *Vicom*. He referred me specifically to paragraph 64 of *CFPH* where Peter Prescott QC in discussing *Vicom* notes that the Board

“did not allow the applicants to monopolise the mathematical method for all conceivable purposes, but they did allow it for the image-enhancing process. I believe that that aspect of the Board’s reasoning holds good today.”

- 20 Mr Dallimore referred me to further passages in *CFPH*, all in his opinion affirming that a computer program is not a computer program “as such” if it is carrying out a technical process. The intent behind this line of argument was to persuade me against adopting an approach that took in his view an overly strict interpretation of paragraph 103 of *CFPH* which reads:

“It was the policy of the “computer program” exclusion that computer programs, as such, could not be foreclosed to the public. (Copyright law is another matter). They would be foreclosed if it was possible to patent a computer when running under the instructions of the program, for example, or a magnetic disk when storing the program.”

- 21 In particular Mr Dallimore appeared concerned that I would proceed on the basis that this particular paragraph effectively excluded any computer program from patentability.
- 22 It is clear to me that the Deputy Judge in *CFPH* did not intend to “foreclose” all computer programs from patentability. Rather it appears to me that the intent in this particular paragraph is to reiterate that the computer program as such exception cannot be circumvented by seeking to claim a computer program as such under the guise of a computer running the program or a disk containing it.
- 23 This is consistent with the long established principle of UK patent law that in deciding whether an invention is patentable, it is the substance of the invention that is important and not the form of wording used to claim it.
- 24 As the practice notice makes clear, the Office’s new approach following *CFPH* does not change the boundary of what is patentable and for the vast majority of cases the answer under the new approach will be the same as under the previous one.

8 T208/84 *Vicom* [1987] OJEP 14

9 *Fujitsu Limited’s Application* [1997] RPC 608

Argument

- 25 The examiner in his latest examination report dated 30th November 2005 having applied the *CFPH* test objected that the application was not patentable as it relates to a mathematical method, a method of doing business and a computer program. The examiner identified the advance as the calculation of the bid value and the ordering of the results according to the bid value.
- 26 In a written response, Mr Dallimore appeared to accept that this is the advance together with possibly the additional step of charging the advertiser the bid value as opposed to the bid amount. At the hearing he appeared to concede that this additional step was not necessarily central to whether the invention was patentable.
- 27 Mr Dallimore also urged me to look at the invention not from the perspective of the relationship between the advertiser and the search engine provider as this focuses too much on the “business model” aspect of the invention. Instead I should look at it from the point of view of the searcher. Because only from there can you see the “technical contribution that is being provided”. The contribution to the searcher is that the method results in the more popular search listings appearing higher in the results list. The invention is about filtering the data in order to create a result list that is potentially more relevant.
- 28 I need to say a few things about this line of argument. The first is that filtering data, to create a list of results with the most relevant at the top is what all search engines basically do and, and indeed have been doing for some time now. Secondly as I see it, what this invention seeks to do is to filter the data in a particular way. That way does not just take into account what the searcher is searching for because if it did then it would not need to consider the amount bid by each advertiser. It would simply place the most popular or relevant listings at the top of the list. Rather the application also has at its heart commercial considerations. Considerations that are aimed at benefiting both the advertisers and the search engine provider.
- 29 I would also add that whether an advance relates to excluded matter (ie it is not technical) is not something that is dependent on who is looking at it. It is either excluded or it is not. In this case I believe that any advance that is new and not obvious lies solely in the realms of excluded matter. The method claimed is a particular method for ordering listings in a network based search result list. I believe this is not technical. Rather I believe that it is a method of doing business. I would add that whether or not the method is done for commercial reasons, and in this case I believe it clearly is, is not to my mind relevant to the question of whether it is a method of doing business. Given that the method is implemented by software, I also believe it excluded as a computer program as such.
- 30 The examiner has suggested that the invention is also excluded as a mathematical method. At the heart of the advance is a mathematical method. The mathematical method in this case unlike in *Vicom*, is not influencing anything of a technical nature. Therefore the invention also relates to a mathematical method.

Conclusion

- 31 I have found that the invention relates to a method of business, a computer program and a mathematical method. I have looked carefully through the application but have been unable to identify anything that might support a patentable claim. I am sure if there was anything else in the application then Mr Dallimore would have brought it to my attention. I therefore refuse the application under Section 18(3) on the grounds that the claimed invention is excluded under Section 1(2).

Appeal

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

Phil Thorpe
Deputy Director acting for the Comptroller