

phrases such that if those words or phrases are entered into a search engine then their website will be included in the results of a search. For example a company providing intellectual property related services might wish to have its website appear in any search based on the keyword "patent".

- 5 The invention is concerned with helping an advertiser or other information providers find the most relevant search terms for their website. It does this by first allowing a new advertiser to suggest potential search terms to be associated with their website. Alternatively a list of potential terms could be obtained by "spidering" the advertiser's website. An estimated rating is then computed for each of these potential search terms. These ratings give an indication of the relevance of each search term. The method then seeks to identify other possible search terms by looking at search terms used by other similar advertisers. The application refers to this as collaborative filtering. Ratings for these new search terms are computed and all the search terms are then sorted according to their ratings into a single list. The advertiser can use this consolidated list to identify the most relevant search terms. The whole process can be repeated until the advertiser is content with the search terms.
- 6 The latest claims are those filed on 10th October 2005. Claim 1 reads as follows:

A computer implemented method for recommending search terms in a computer network search apparatus for generating a result list of items representing a match with information entered by a user through an input device connected to the computer network, the search apparatus including a computer system operatively connected to the computer network and a plurality of items stored in a database, each item including information to be communicated to a user and having associated with it at least one search term, an information provider and a bid amount, the method comprising:

- a) obtaining a set of potential search terms for acceptance by a new information provider who is adding items to the database;
- b) computing correlations between the potential search terms for the new information provider and search terms of other information providers stored in the database;
- c) computing an estimated rating for the each potential search term for the new information provider;
- d) sorting the potential search terms according to the computed estimated ratings;
- e) presenting to the new information provider on an output device the sorted potential search terms;
- f) receiving from the new information provider at an input device an indication of accepted search terms;

g) repeating b) through e) until a completion indication is received from the new information provider.

The Law

- 7 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

- 8 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

- 9 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.

- 10 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

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

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.

- 11 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

- 12 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 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.
- 13 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.”

- 14 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.”

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)

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

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

- 15 In particular Mr Dallimore appeared concerned that I would proceed on the basis that this particular paragraph effectively excluded any computer program from patentability.
- 16 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.
- 17 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.
- 18 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.

Argument

- 19 The examiner in his latest examination dated 3 November 2005 applied the two stage test set out in *CFPH* and in doing so found that the advance lay under the description of a mental act, a method of doing business and a computer program. He identified the advance as a method of recommending search terms to an advertiser in which potential search terms are rated and presented in rating order.
- 20 At the hearing Mr Dallimore sought to persuade me that it was more than that. He contended that it also included how the recommendations are arrived at and how they are presented to the advertiser. Hence he believed the advance comprises the method set out in steps (a) to (g) of claim 1.
- 21 On this point I agree more with Mr Dallimore. The advance that the invention makes is in my opinion as much about how the recommendations are made as it is about the fact that recommendations are made. The advance is a method that takes search terms from two sources, one of which is related specifically to the advertiser and one of which is related to other advertisers, rates all the terms and then presents that information to the advertiser.
- 22 Having identified the advance I need to move on to the second part of the *CFPH* test. This requires me to determine whether the advance is both new and not obvious under the description of an “invention” in the sense of section 1(2) of the Act. Or to put it another way is the new and non obvious advance or contribution in technology?
- 23 The examiner has argued that any advance lies only in fields excluded from the description of an “invention”. In particular that the advance is merely one or more of the following: a mental act, a business method or a computer program.

- 24 There is no dispute that the invention is a computer implemented invention that uses hardware that is entirely conventional. That the invention is given effect by software, i.e. a computer program does not however mean that it is excluded as a computer program as such. I need to look beyond the means for effecting the advance and look at the advance itself. If that is technical in nature then we are not dealing solely with a computer program.
- 25 In paragraph 104 of *CFPH* the Deputy Judge introduced his “little man” test as a possible way of testing whether an invention is really about computer programming at all. The attraction of this test in inventions where the computer is used to control an artifact or industrial process is clear to see. However as the examiner has already noted it does not readily apply itself in cases such as this where there is no such artifact or industrial process to control.
- 26 Rather it is necessary to consider whether the computer program is contributing anything that is technical in nature. In *Vicom*, as the Deputy Judge in *CFPH* acknowledged, the contribution, automatic image enhancement was considered to be technical.
- 27 Here however the contribution or advance is geared to providing a list of search terms. Despite the efforts of Mr Dallimore to persuade me otherwise I believe that neither the list nor the manipulation of data necessary to arrive at the list is technical.
- 28 If it is not technical then what is it? At the heart of the invention is the desire to provide improved search terms for use by for example an advertiser looking to advertise through the internet. As the application succinctly puts it, what the invention is trying to do is find all of the good search terms for an advertiser’s site while getting rid of the bad ones. It does this by providing a different (which may or may not be new and non obvious) way of recommending search terms. This uses information from the advertiser himself and also from other advertisers.
- 29 I asked Mr Dallimore whether this was similar to someone ringing up a paper business directory and suggesting that they would like to put an advert for their new hair salon under the heading “Hairdressers” only to be told that other similar advertisers had done better by listing their salons under “hairdressers” and also “unisex hairdressers”. There is nothing technical in what is happening here. The acts that are being done are mental in nature and this type of transaction could readily be termed a method of doing business. The only difference, I suggested, between this and the invention was that the latter is performed on a conventional computer under the control of a computer program.
- 30 I did not find his response, which again focused on the way that the invention determines which search terms are better, that convincing. In particular I was not persuaded by any of his arguments that any of the steps a) to g) are technical.
- 31 Applying the second stage of the test I therefore find that any advance that

might be new and not obvious lies in excluded matter in particular a method for doing business. Given that the invention is implemented by software running on a conventional computer system I also find that the invention relates to a computer program as such.

- 32 During the hearing Mr Dallimore raised the possibility of further amending the claim by explicitly referring to the method producing one “interleaved” list by combing the results obtained from spidering with those from the corroborative filtering. He also suggested swapping around current steps A and B. Whilst this may make the claim clearer, it does not introduce anything technical into the advance.

Conclusion

- 33 I have found that the invention relates to a method of business and a computer program. 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

- 34 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