

concept, and so for the purpose of this decision it is only necessary for me to recite the first of these independent claims:

“1. A method of distributing data to users of a computer system, comprising:

identifying, from a plurality of formatted financial data records, data records to be electronically transferred to a plurality of users of the computer system in accordance with data indicating the data records that are to be delivered to respective users; and

mapping each identified data record for each user to whom the record is to be transferred in accordance with data indicating mapping of the respective data record for at least one application operable on a computer terminal accessible by the user to whom the data record is to be delivered.”

6 For reasons that will become apparent later, I will also detail the preferred features set out in dependant claims 2 and 14:

“2. A method according to claim 1, wherein the step of mapping each identified data record comprises mapping each identified data record in accordance with data specific to each of the plurality of users.

14. The medium or media of claim 12, wherein the programming causes the computer system to map data records in accordance with data indicating different mappings for a plurality of applications.”

The Law

7 The examiner has argued that the claimed invention relates to subject matter excluded from patentability under section 1(2) of the Act, and in particular to a computer program excluded under section 1(2)(c). 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) a literary, dramatic, musical or artistic work or any other aesthetic creation whatsoever;

(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 purpose 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 the corresponding provisions of the European Patent Convention (EPC), i.e. Article 52.

Interpretation

- 9 In July 2005, shortly after the second substantive examination report had been issued, Mr Peter Prescott QC handed down judgment in *CFPH*¹ which raised questions regarding the UK Patent Office's practice in dealing with applications considered to relate to matter excluded by section 1(2).
- 10 In response to this judgment, the UK Patent Office issued a practice notice dated 29th July 2005 announcing an immediate change in the way that it examines applications for patentability. The examiner duly followed this approach in his third examination report, setting out the test for whether an invention is excluded under section 1(2) 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 "an invention" in the sense of Article 52 of the European Patent Convention (EPC) - broadly corresponding to section 1 of the Patents Act 1977.

- 11 Once the new and non-obvious advance has been identified, Mr Prescott suggests² 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. Subsequent judgments issued by the High Court (*Halliburton*³, *Shoppalotto*⁴, *Crawford*⁵ and *RIM*⁶) all point to a similar requirement for a technical advance in order to pass the test for patentability.
- 12 At the hearing, Mr Kenrick gave a detailed account of the relevant authorities in this area of patent law, most notably the Court of Appeal's judgment in *Fujitsu's Application*⁷ and also those judgments referred to above, and agreed that there was an implicit requirement for a technical advance/effect/contribution in section 1(2) in order to make an otherwise excluded invention patentable.

Argument

- 13 The examiner argues that the advance in the art made by the claimed invention is a data distribution system which identifies from a plurality of formatted data records a set of data records to be transferred to respective users and then maps each identified data record for each user into suitable formats. The advance is embodied in computer software run on conventional networked computers. Mr Kenrick, both in his letter dated 11th April 2006 and again at the hearing, agrees that the advance made by the invention lies in the filtering and mapping of financial data prior to transmission to the end-user.
- 14 What remains to be decided is whether this advance can be regarded as an advance

¹ *CFPH LLC's Application* [2005] EWHC 1589 (Pat)

² See *CFPH* paragraph 97

³ *Halliburton Energy Services Inc v Smith International (North Sea) Ltd and others* [2006] RPC 25

⁴ *Shopalotto.com's Application* [2005] EWHC 2416 (Pat)

⁵ *Cecil Lloyd Crawford's Application* [2005] EWHC 2417 (Pat)

⁶ *Research In Motion UK Ltd v Inpro Licensing* [2006] EWHC 70 (Pat)

⁷ [1997] RPC 608

in technology or simply an advance in one of the excluded categories set out in section 1(2). Mr Kenrick argued that the filtering part of the advance ensures the efficient use of network capacity by limiting the amount of unnecessary information transmitted to the end-user. Having already referred me to *CFPH* with regard to the way I should interpret exclusions under section 1(2), I asked Mr Kenrick to consider the facts in that particular case, and to explain how the present filtering process differed from the dynamic filtering provided in *CFPH* which the judge found to be unpatentable. In *CFPH*, the customer was able to access only wagers that were determined to be affordable based on a credit limit stored centrally, i.e. the system did not transmit information about wagers that would exceed the customer's credit limit, only those that the customer could afford, thus reducing the amount of traffic passing across the network.

- 15 Instead, Mr Kenrick and Dr Collins argued that the subject matter in *RIM* more closely resembled the technology in the present application, and sought to draw parallels between the client computers in the present application, which receive specified financial data in a format that requires no further processing, and the low-end mobile computers in *RIM* which receive re-formatted web-page data from a proxy-server.
- 16 Having failed to see the analogy that was being made with regard to the filtering process, I pressed Mr Kenrick further to explain how this differed from the efficient transmission of data already considered in *CFPH*. It eventually became clear that whilst the invention provides for re-formatting of the information prior to transmission, this is not done with the aim of reducing the burden placed on the network but merely serves to improve inter-operability with client applications. The only improvement in transmission efficiency is achieved by preventing irrelevant information being sent to the client.
- 17 Mr Kenrick then went on to consider the mapping part of the advance, which, as I accepted at the hearing, does bear some similarity with the re-formatting arrangement provided for in *RIM*. Mr Kenrick referred specifically to paragraphs 184 and 186 of Mr Justice Pumfrey's judgment:

"184. The claims of the patent are all concerned with how to transmit data between a field computer and a proxy server to enable a field computer, inadequate in processing and display power, to browse the web and produce results substantially better than its modest abilities would indicate.

"186. It is now settled, at least at this level, that the right approach to the exclusions can be stated as follows. Taking the claims correctly construed, what does the claimed invention contribute to the art outside excluded subject matter? The test is a case-by-case test, and little or no benefit is to be gained by drawing analogies with other cases decided on different facts in relation to different inventions. *RIM* says that the point does not require elaboration. It contends that all that is claimed, as a matter of substance, is a collection of programs for computers. I think this is wrong. What the claims give is a technical effect: computers running faster and transmitting information more efficiently, albeit ultimately for the purpose of displaying part of that information."
- 18 As I have already outlined above, the proxy-server system in *RIM* is able to receive web-page information and convert it into a format suitable for display on lower-end mobile computers. This re-formatting is required in order to display web-page material intended for larger displays onto the smaller sized displays of mobile computers, and is carried out within a proxy-server because of the limited processing capacity of mobile computers. In the present case, the mapping function re-formats financial data

into a form suitable for direct import into the user's application, thereby eliminating the need to process this data at the user end.

Discussion

- 19 Whilst I can see some similarity between the facts of this case and those in *RIM*, I do not consider that the judgment in *RIM* helps in any way to decide whether the filtering of financial data by a computer program provides the technical advance necessary to pass the test for patentability. The dynamic filtering disclosed in *CFPH* is, however, on all fours with the filtering step provided in the present case, and since Mr Prescott decided in that case that such a step was not patentable, I am bound to follow. The filtering step clearly reduces the amount of data traffic crossing the network, but achieves this not by solving the problem of network capacity by any technical means but simply by circumventing the problem in the first place.
- 20 In *CFPH*, Mr Prescott considered this advance to be a business fix, and the same could also be said here. However, on the basis that the filtering step comprises nothing more than a program for instructing a computer to process financial data in a non-technical manner, I also consider that that this advance lies wholly within the meaning of a computer program set out in section 1(2)(c).
- 21 Turning next to the mapping of data into a format specified by the user prior to transmission. It is clear from the description that the advance made by the invention is not in the re-formatting of data per se, but in the fact that the data is re-formatted in accordance with preferences set by the user prior to transmission. This has the effect of removing the need to re-format data at the user side and reducing the processing burden on the user's computer. This is very similar to the situation in *RIM*, where a proxy-server is provided to re-format data prior to transmission to the mobile computer.
- 22 However, there is a distinction between the two cases. In *RIM*, the proxy-server is needed to carry out processing operations not possible on the mobile computer. Without the proxy-server, the system would not be able to display web page material in a manner originally intended for larger screens, i.e. the system would not work without the functionality of the proxy-server. In the present invention, the re-formatting of data could easily be done on the user's computer, but this burden has been shifted to the client side for reasons other than the need to solve a technical problem. The description at page 5, lines 10-21 says that the user-accessible terminals "may include their own processors, as for example desktop "personal" computers and/or lower powered "thin clients"...; or they may be provided as "dumb" input-output terminals consisting of variations thereof. Similarly at page 14, lines 14-17, it is suggested that the re-formatting could equally be carried out at the user terminal:

"Whether installed in client server 105, user terminals 106, 107, or distributed between them, API 104 formats (or re-formats), i.e. maps, records into any form(s) requested by the individually user(s), as for example by re-ordering, deleting, editing, and/or adding elements within the information strings carried by the records."
- 23 Although this seems inconsistent with other passages in the description and also the submission made by Mr Kenrick, it is clear to me that there is no technical need for the mapping function to be carried out prior to transmission to the user, nor does doing so solve a technical problem. This is clearly a different situation to the one in *RIM*, and I have no difficulty in reaching a different conclusion to that arrived at by Mr Justice Pumfrey. The re-formatting of data prior to transmission seems to be an

arbitrary choice of the programmer, not one dictated by technical constraints in the system. As such, I do not consider that the mapping of financial data between from one known format to another prior to transmission provides the technical advance necessary to pass the test for patentability. This mapping function, carried out in accordance with computer instructions, lies wholly within the meaning of a computer program set out in section 1(2).

- 24 In referring to claim 2 of the application, Mr Kenrick argued that the additional feature of being able to map data in accordance with requirements specific to each user provided improved inter-operability and flexibility in the system. He made a similar point in relation to claim 14, where the mapping of data was done on the basis of requirements specific to particular applications. Whilst I accept that these features improve the functionality of the computer program, i.e. by responding to a variety of individual end-user requirements, I do not consider that they differ in a technical sense to the advances that I have already considered above.

Conclusion

- 25 I have found that the advance made by the applicant lies wholly within the meaning of a computer program set out in section 1(2)(c) and is, therefore, not patentable. I have read the specification in its entirety and cannot identify anything that could form the basis of a patentable invention. I therefore refuse the application under section 18 as failing to meet the patentability requirements of section 1.

Appeal

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

H Jones

Deputy Director acting for the Comptroller