BL O/192/06

14 July 2006

PATENTS ACT 1977

APPLICANT Orange Personal Communications Services Limited

ISSUE Whether patent application number GB 0122824.6 relates to a patentable invention

HEARING OFFICER Mrs. S E Chalmers

DECISION

Introduction

1 This decision is about whether Orange Personal Communication Services Limited should be granted a patent for a particular invention. The examiner has reported that the invention is a method for doing business and a computer program as such. The patent application has an earliest filing date of 21st September 2001.

2 The examiner and the applicant were not able to agree and a hearing took place before me on 6 July 2006. Ms Heather McCann (of the firm EIP) assisted by the co-inventor Mr Michael Williams (Orange Network Services) and by Ms Lyndall Gibson (Orange Group Limited) appeared on behalf of the applicants. The examiner also attended in case I needed any assistance as to the examination process.

The application

3 The application is concerned with a computer-implemented method of determining the tariff or "rating data" for use in pricing a call made from a mobile telephone. The method involves looking up the destination number on a stored subscriber record whilst the call is in progress and using this information to determine the tariff to be charged. The method is of particular use in the so-called "family and friends" service where discounted rates are applied in respect of certain destination numbers or "addresses" nominated by the subscriber.

4 The latest form of the claims includes four independent claims, namely claim 1 directed to a computer-implement method of determining rating data, claim 16 directed to a data storage system for storing rating data, claim 20 to a

processing system for determining rating data and claim 31 to a mobile communications device. Claim 1 sets out the essentials of the invention:

> 1. A computer-implemented method of determining rating data for use in rating a service requested to be provided to a subscriber of a mobile telecommunications system, the mobile telecommunications system comprising a storage system arranged to store subscriber records identifying data relating to individual subscribers of the mobile telecommunications system, said subscriber records comprising data identifying one or more destination addresses associated with a said service, the method comprising the steps of:
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> receiving a request from the subscriber to provide a service to the subscriber; retrieving data identifying a destination address corresponding to the received service request in response to the receipt thereof;
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> identifying rating data corresponding to said received service request on the basis of said retrieved data identifying the destination address and a said stored subscriber record corresponding to the subscriber; and
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> generating charging data in respect of the requested service;
>
> wherein said destination address is retrieved during provision of said service and before said charging data are generated, so as to reduce the amount of processing in generating said charging data.

The Law

5 The examiner has objected under section 1(2) of the Act, the essential parts of which are shown in bold below:

> **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 –**
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> (a) a discovery, scientific theory, or mathematic method;
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> (b) a literary, dramatic, musical or artistic work or any other aesthetic creation whatsoever;
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> (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**

6 As regards my interpretation of section 1(2), I shall be governed by the

judgment in *CFPH*[1] and the Practice Notice[2] issued on 29 July 2005. In CPFH, a two-stage test was advocated:

> (1) Identify what is the advance in the art that is said to be new and not obvious (and susceptible of industrial application)
>
> (2) Determine whether it is 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 – broadly corresponding to section 1 of the Patents Act 1977.

7 I note that Pumphrey J provided a somewhat more concise expression of this in *RIM*[3]: "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** (my emphasis), and little or no benefit is to be gained by drawing analogies with other cases decided on different facts in relation different inventions."

Argument

8 At the hearing, Ms McCann focused on the substance of the invention rather than on the detailed wording of the claims. Referring me to the *Dell*[4] decision, and to paragraph 23 in particular, she pointed out that any invention was to do with business in the global sense because we lived in a capitalist society and companies were here to make profits. From that viewpoint, she accepted that the invention provided a method that could be used in a business context. That was not the same thing, she said, as saying that it related to a method for doing business. She submitted that the underlying problem could only be defined in a meaningful and consistent way with recourse to the claims and saw this approach as being entirely consistent with *CFPH*.

9 Ms McCann emphasized that the invention was concerned with how the call was rated and the use of computer processing resources to work out how to rate a call. She was at pains to point out that the advance did not relate to rating *per se* (which was not new) nor did it relate to rating a call in the context of a destination address *per se* (which was also not new). She argued rather that the advance lay in rating a call in the context of a destination address that was stored in a subscriber record and during the provision of the service. In other words, she submitted that the advance lay in *how* the call is rated. She therefore disagreed with the examiner that the underlying problem was a business or accounting problem. In her view, the examiner's analogy of the management of a utility bill that may either be paid monthly in advance with a direct debit or paid in arrears with a metered supply was inappropriate.

10 Mr Williams provided further technical details of the invention for which I am grateful. He explained that, in existing systems, users were billed for their use

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[1] *CFPH LLC's Application [2005]EWHC 1589 Pat*
[2] "Patent Office Practice Notice: Patents Act 1977: Examining for patentability" – see http://www.patent.gov.uk/patent/notices/examforpat.htm
[3] Research in Motion UK Ltd v Inpro Licensing [2006] EWHC 70
[4] Dell Products LP BL O/146/56

of network services after the service had been used. Since users were billed at a later date (for post-pay) or their accounts debited at a later time (for pre-pay), data forming the basis of this billing process had to be stored. He made the point that when the number of calls was in millions, the storage requirement and post-processing of usage data was significant. There was also the problem that the subscriber record might have changed during the delay between making and rating the call leading so historical information needed to be stored to ensure the rating for each call was accurate. Processing the call therefore required the system to look up several versions of the subscriber record to determine what tariff should be applied.

11 In contrast, he stated that the method of the invention, which determined the tariff in "real time" (rather than after the call had ended) on the basis of the subscriber rating record valid at the time of service provision, led to a reduced amount of computer processing as less data needed to be stored to generate the charging data. As a result, there was no need for the system to refer to several versions of the list of destination addresses after the call to identify the correct tariff. In the case of post-pay subscribers, the invention meant that the call record was marked with the rating at the time the call was made so no extra post-processing was needed. In the case of pre-pay arrangements, the method avoided the need for batch processing after the call and the consequent delay in adjusting the amount of credit available to the customer.

12 Ms McCann emphasized that the invention therefore significantly reduced the amount of computer processing compared to known systems and provided a reduction in the amount of storage space required to rate the usage of network resources. In summary, by rating the call in real time, it was less intensive of computer operations than doing the rating after the call was made. In her view, the invention was therefore a technical solution to a technical problem and did not lie in one of the excluded fields specified in section 1(2).

13 Ms McCann reminded me that the boundary between what was and what was not a technical contribution or technical effect was not clear and it was clear from the precedents that each case had to be decided on its own facts. I agree. She drew a distinction between this invention and *Fujitsu*[5] and *Macrossan*[6] which were concerned with inventions that automated a manual process. She also noted that these required user input that the computer worked on and displayed the result. In contrast, the present invention neither automated a manual process nor interacted with the user and she therefore submitted that these precedents did not apply.

14 Ms McCann acknowledged that the argument *per se* that the technical effect lay in speedier and more efficient processing did not necessarily mean that patents should be granted for all computer-implemented inventions. She agreed that it was essential to look at the technical context to decide whether the invention was patentable and to identify that "something extra" in the identified advance which took it outside the exclusion "as such". In this particular case, she argued that the "something extra" was the technical effect

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5 Fujitsu Ltd's Application [1997] RPC 608
6 Macrossan's Patent Application [2006] EWHC 705 (Ch)

achieved by the method of the invention which was to use less storage space and fewer computer processing resources to carry out the rating process.

Decision

15 The authorities emphasize that the substance of the invention must be assessed. I think it is clear, both from the application and what was said at the hearing, that the hardware, software and programming techniques used in the invention are conventional. Ms McCann has acknowledged that the methods of rating a telephone call *per se* and of rating a call in the context of a destination address *per se* are both known in the art. In answer to the first step of the *CFPH* test, I therefore find that the advance in the art which is new and inventive lies in when the tariff for the call is determined ie whilst the call is in progress, and in a computer-based system for doing this.

16 I now turn to the second step of the *CFPH* test. It seems to me that determining the tariff to be charged for a telephone call is a business process and that the whole point of the invention is to carry out that billing process more efficiently. However I must decide whether this amounts to a method for doing business as such. Mann J in paragraph 30 of the *Macrossan*[6] judgment quoted with approval a paragraph from *Pensions Benefit*[7], as assisting in a decision as to a business method as such. In my view, the advance in the present invention is all to do with "*processing and producing information have purely administrative, actuarial and/or financial character*", to use the words of the decision of the Technical Board. I am not persuaded by Ms McCann's submission that the invention can be divorced from the business context. I therefore find that the invention is a method of doing business as such.

17 The fact that an invention may reduce the amount of data processed thus resulting in a speedier and more efficient system has been explored in many previous cases. Notably, in *Fujitsu*[5], Aldous LJ said at page 618: "*Mr Birss is right that a computer set up according to the teaching in the patent application provides a new tool …. which avoids labour and error. But those are just the sort of advantages that are obtained by use of a computer program*." The present invention lies in when the rating of the call is carried out and I can see nothing in the application to suggest that this is achieved other by standard programming on standard hardware. Whilst time-shifting the point at which the rating of the call is determined may indeed lead to increased speed and efficiency in the use of computer processing resources, in my view this flows from the decision as to when to carry out the call rating. I therefore do not agree with Ms McCann's submission that there is a technical effect in using less storage space and fewer computer processing resources to carry out the rating process. In my view, the invention merely avoids, rather than remedies, perceived technical problems. I therefore find that the invention relates to a computer program as such.

Conclusion

18 I have found that the invention relates to a method for doing business as such;

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7 Pensions Benefit Business Partnership T931/95

and to a computer program as such. It is therefore not new and obvious (and susceptible of industrial application) under the description “an invention” in the sense of Article 52 EPC, and is therefore not patentable. I have been unable to find anything in the application which could form the basis of a patentable invention. I therefore refuse the application because it does not comply with section 1(2)(c) of the Patents Act.

Appeal

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

MRS S E CHALMERS
Deputy Director acting for the Comptroller