



31<sup>st</sup> May 2006

## **PATENTS ACT 1977**

Agilent Technologies Inc **APPLICANT** 

Whether patent application number GB 0223268.4 complies with section 1 ISSUE

P Hayward HEARING OFFICER

## **DECISION**

This decision was given orally. The attached is a transcript of the decision as approved by the hearing officer.

| Α | THE PATENT OFFICE  |
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| В | Conference Suite B2 Concept House Cardiff Road Fos: 42 Newport Gwent, NP10 8QQ   |
|   | Wednesday, 31st May, 2006  |
| С | Before: MR PETER HAYWARD  ( <u>Divisional Director</u> )  ( <u>Sitting for the Comptroller-General of Patents, etc.</u> )  |
| D | In the Matter of THE PATENTS ACT 1977, section 1(2)(c)   |
|   | And  |
| E | In the Matter of THE APPLICATION No GB0223268.4  of AGILENT TECHNOLOGIES INC for Letters Patent  |
|   | (Ex Parte Hearing)   |
|   | Abstract Title: <u>Processing information from a telephone network</u>   |
| F | Transcript of the Shorthand Notes of Harry Counsell (Wales) 41, Llewellyn Park Drive, Morriston, Swansea, SA6 8PF (Tel: 01792 773001 Fax: 01792 700815 e-mail: HarryCounsellW@aol.com) Verbatim Reporters            |
| G | MR CHRISTOPHER HIRSZ (of Messrs HRBB, Merlin House, Falconry Court, Bakers Lane, Epping, Essex CM16 5DQ), assisted by MR JOHN MacCARTNEY, MR DAVID COKER and MR ANDREW HARTLEY, appeared on behalf of the Applicants |
|   | DR MARK GAINEY (Examiner, The Patent Office)   |
| Н | D E C I S I O N AS APPROVED BY THE HEARING OFFICER   |

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THE HEARING OFFICER: The hearing today has been held to consider the question of whether the invention that forms the subject of the application in suit is a patentable invention having regard to section 1(2)(c) of the Patents Act 1977 which excludes from patentability, amongst other things schemes, rules or methods for performing mental acts and programs for a computer to the extent that the invention relates to that thing as such. The examiner has objected that the invention as set out in the main claims 1 and 14 falls foul of the "program for a computer" exception, and in addition, that what is set out in the method claim, claim 14, falls foul of the "mental act" exclusion.

The invention relates to monitoring a telephone signalling network, that is, the network that controls the main voice and data communication channels. It is known to install devices which sit on the network, monitor what is going on, and produce data records of several different types. Products are available (in practice, a piece of software) that can be coupled to these known monitoring devices to analyse one particular type of record in one particular way. The core of this invention is to have something that is more flexible, that can be coupled to one of these known monitoring devices and can analyse more that one type of record and carry out more than one analysis on a given type of record. Thus you have the flexibility of selecting both the type of record you want to look at and the analysis you want to carry out, and this is all available in one device rather than having to have a lot of different devices each only capable of performing one kind of analysis on one type of record.

There are two main claims. Claim 1 is to -

"An apparatus for processing data records, the apparatus comprising: means for receiving data records of a plurality of different types, each type having a different predetermined format;

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a plurality of type-specific function libraries, each library having functions associated with each of the particular types of data record;

means for receiving instructions indicative of the particular type(s) of data records to be received and indicative of which particular functions are to be performed on the data records to be received;

means for reading the contents of the type-specific library(ies) associated with the particular type of data records to be received;

means for processing received data records according to the particular functions to be performed; and

an output for rendering the processed data records".

So the claim requires libraries to be set up for "functions" (ie kinds of analysis) and the ability to input instructions to say what type of data you are interested in and what function you want carried out. It will then retrieve the data from the known network monitoring device and carry out the function.

Claim 14 is a method claim which I think it is fair to say closely reflects claim

1. The only observation I would make is that claim 14 is limited to a telephone network, so it commences -

"A method of processing data records from a telephone network".

Claim 1 is not so limited.

There are a number of subordinate claims. I will need to refer to one of those, claim 4, later. There are also claims at the end to a computer program element that will execute any of the methods in the previous claims, a computer readable medium bearing such a program and various other claims like that.

The applicants have conceded that all the subordinate claims (bar possibly claim 4) and these final claims stand or fall with claims 1 and 14, so I don't need to go into them in any detail for present purposes.

I have described the functionality which this new apparatus and method carry out. It is quite clear from the description that, at least in the preferred

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embodiment, all this is done in software. For example there is a passage on page 6 which says -

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"As shown in FIG. 3, the DMC [the DMC is the apparatus of claim 1] provides a software framework 34 for generic processing of data records and a strategy for using the type-specific function libraries ..... The framework 34 is a skeletal structure of software .....".

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functions written by application developers. So I think it is quite clear that what is described is implemented in software. It has been alleged to me this morning that it could also be constructed in hardware, and I will come back to that possibility in due course.

And it goes on later on to talk about the framework providing 'function holders' for

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Let me turn first to the principles that I should apply in deciding the issue before me. I have had a large number of precedent cases referred to me, and some Office cases as well. I do not think I need to mention every single one of them in my decision. They fall into three broad categories. First, there is a group which refer to the construction of claims. At the end of the day I do not think there was any argument about the correct principles of claim construction, which are well established. The applicants had cited these cases primarily to stress the importance of construing claims.

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The second group of precedents go to the particular issue of how section 1(2)(c) is to be interpreted following the judgment of Mr Peter Prescott QC in CFPH LLC's Application [2006] RPC 5 last summer, when he reviewed the principles and prior case law in considerable detail and proposed a slightly different approach. Since CFPH there have been a number of other High Court judgments which, whilst they may not have explicitly endorsed every single element in CFPH, have all broadly endorsed the core of that approach, although they have expressed it in different ways. I will refer to some of those shortly.

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"There has been a tendency, especially in the earlier decisions of the Technical Boards of Appeal, to consider that the exclusions have in common a lack of 'technical effect' ..... The real question is whether there is a *relevant* technical effect, or, more crudely, whether there is enough technical effect: is there a technical effect over and above that to be expected from the

Finally, my attention was also drawn to one important earlier precedent on this issue, Fujitsu Limited's Application [1997] RPC 608. This was a Court of Appeal judgment, which in essence said that the test for determining whether an invention was excluded was whether the invention made a technical contribution. Although Mr Peter Prescott QC in CFPH carefully reviewed Fujitsu and other prior Court of Appeal judgments, some have suggested that CFPH goes in a slightly different direction from these earlier cases. However, several High Court judges have subsequently said no, it does not, the CFPH approach is consistent with Fujitsu. I would refer particularly to Crawford's Application [2006] RPC 11, where Kitchin J said in paragraph 11 that he thought that the approaches in Halliburton Energy Sevices Inc v Smith International [2006] RPC 2 (a judgment handed down on the same day as CFPH), CFPH and Fujitsu were all consistent; and to Shopalotto Ltd's Application [2006] RPC 7, where Pumfrey J said in paragraphs 9 and 10 that looking at whether the contribution to the art lay outside the list of excluded matter was an approach supported by the earlier Court of Appeal precedents such as Fujitsu.

Even more recently, Mann J has endorsed the approach in Macrossan's

Application [2006] EWHC 705. It is worth quoting, partly because it is the most recent case but partly because the judge looked not only at CFPH but also at Hallibuton, Shopalotto and a fourth recent judgment of Pumfrey J, Research in Motion UK Ltd v Inpro Licensing [2006] EWHC 70. In Macrossan, Mann J quotes Pumfrey J from Shopalotto -

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mere loading of a program into a computer? From this sort of consideration there has developed an approach that I consider to be well established on the authorities, which is to take the claimed programmed computer, and ask what it contributes to the art over and above the fact that it covers a programmed computer. If there is a contribution outside the list of excluded matter, then the invention is patentable, but if the only contribution to the art lies in excluded matter, it is not patentable".

I will interject there to say, that is of course the core of the test in <u>CFPH</u>.

Pumfrey J in <u>Shopalotto</u> went on -

"An invention may be viewed as a solution to a concrete technical problem. Merely to program a computer so that it operates in a new way is not a solution to any technical problem, although the result may be considered to be a new machine. It follows that an inventive contribution cannot reside in excluded subject matter".

Having quoted this, in Macrossan, Mann J went on to say -

"I respectfully find this of great assistance. The position is expressed a little more clearly than it was in *Halliburton* and *CFPH*, though the point is the same. It provides a clear answer to the present case. The invention in the present case is, in substance, a computer program, as appears above. The inquiry does not stop there, however. Under the approach of Pumfrey J I have to ask what it contributes to the art. It contributes a degree of automation, ease and efficiency, but when one goes on to consider that further one finds that it automates a method of performing a mental act - see above. That is all it contributes to the art. It therefore contributes something which is within the excluded subject matter, which is not enough to make it patentable".

Thus the way the case law has continued since <u>CFPH</u> underlines the point that one must look at the contribution to the art, and ask whether it falls solely within the "excluded subject matter" areas. That I take to be the correct legal test. Moreover, a number of judges have now said this is not inconsistent with the technical contribution approach in <u>Fujitsu</u>. If the contribution to the art is a technical one, that is likely to mean the contribution lies outside the excluded area.

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Because there is an objection in respect of "mental act" as well as "program for a computer", I will quote <u>Fujitsu</u> itself on this aspect. The comment was strictly <u>obiter</u> but, coming from the Court of Appeal, it is not one that I can just ignore. It obviously has some weight. Aldous L J said there at page 621 -

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"Methods of performing mental acts, which means methods of the type performed mentally, are unpatentable, unless some concept of technical contribution is present ".

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In <u>Fujitsu</u> the method in question was, like the present method, something that was done by a computer. So this suggests that a method of the type performed mentally is unpatentable, unless some concept of technical contribution is present, even if the method is computer-implemented.

How do these principles apply to the present case? I am going to start with

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claim 1. Mr Hirsz stressed that it was important to start with the claims, and not to look vaguely in the specification for something that I can call "the substance of the invention". I agree. I am aware that there has been one recent Office decision where that was not done, but it seems to me to be the correct approach. So long as one has meaningful claims (and that is not always the case with private applicants), the contribution to the art ought to be found in the claims. The point on "substance" comes from Merrill Lynch's Application [1989] RPC 561, quoted in Fujitsu, and relates to the question of whether you can take an inherently unpatentable claim and make it patentable by adding a little bit on, eg by expressing the invention as an apparatus. I do not read Merrill Lynch as meaning that you ditch the claims altogether and look vaguely in the specification to find the substance of the invention. You must start with the claims, but take

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care not to be beguiled by their precise formulation.

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I asked Mr Hirsz what he believed to be the contribution to the art in claim 1, and he said it was the facility to be able to choose which types of record you want to look at and which functions you want to carry out on those records. I am happy to accept this. Mr Hirsz also said the invention was at the system architecture level, because it was the architecture that gave the requisite flexibility, and again I accept that.

At one point Mr Hirsz suggested that the ability to select the type of record and the function was a technical feature. I disagree. I cannot see anything technical in that. He also, I think, suggested that the fact that it was the architecture that allowed you to do this was itself sufficient to give a technical contribution. I am afraid I disagree again on that. I note with interest that in Macrossan claim 1 was also a software architecture, and that nevertheless Mann J had no hesitation in holding in paragraph 33 that it was a computer program as such. So the mere fact that the invention lies in a software architecture does not take it outside the computer program exclusion.

Of course, one of the things that has been stressed to me this morning (and is stressed in a number of the precedents) is that each case has to be looked at on its merits. I absolutely agree with that. So the fact that an architecture was found to be unpatentable in <a href="Macrossan">Macrossan</a> does not necessarily mean that an architecture has to be rejected here. However, I cannot see anything in the software architecture here that makes a contribution outside excluded matter, and in particular, outside the exclusion of programs for computers. All we have is a better, more flexible program that avoids the need for a whole series of individual programs

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As I indicated earlier, Mr Hirsz also argued that claim 1 was allowable because it could be implemented in hardware by means of punch cards and bits of electrical and mechanical apparatus. No such hardware implementation is disclosed in the specification, and I make no ruling on whether a hardware implementation would or would not fall foul of the exclusion. However, if a claim covers both patentable and unpatentable subject matter it is a bad claim. If the only patentable implementation of this idea is in hardware, then the claim would have to be limited to that. The claim is not so limited, and of course it cannot be so limited because there is no disclosure of any hardware implementation at all. So I reject the argument that, because the invention could be implemented in hardware, I have to allow the claim. So in short, I find that the contribution to the art made by the invention of claim 1 is solely in an excluded area, that is a program for a computer as such, and accordingly it is not patentable.

Claim 14, apart from the fact that it says the data records come from a telephone network, is on all fours with claim 1, and I think exactly the same argument applies to this claim. I therefore reject claim 14 too, for the same reasons as claim 1.

There was an additional objection to claim 14 that it was merely a mental act. Having rejected the claim as being a program for a computer as such, strictly I do not need to consider this point, but I will deal with it very briefly. The argument is that the steps in claim 14 are steps that could be carried out mentally. As the claim is currently drafted, the steps are such things as receiving instructions, receiving more instructions, reading the contents of a library, receiving data records, processing the data records according to the functions to be performed, and then providing an output. I agree with the examiner that this is merely

defining a method of a type that could be carried out mentally. It could be saved, according to <u>Fujitsu</u>, if some concept of technical contribution is present; but I cannot see one. Accordingly I find that claim 14 also falls foul of the "method for performing a mental act" exclusion.

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As I said earlier, the applicants concede that there is only one other claim that could have independent validity, and that is claim 4. It is a subordinate claim dependent on claim 1, and also dependent on two preceding subordinate claims, and it reads -

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"An apparatus for processing data records according to (the preceding claims), wherein the set of common functions includes one or more functions that provide system management functions operative on the apparatus".

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I understand the applicants' argument here to be that system functions operative on the apparatus could be functions that lead to greater efficiency in the operation of the telephone network. That may or may not be true. But that is not what the claim is limited to. It is simply providing system management functions. That is not sufficient to take it outside the excluded area, so I find claim 4 to be unpatentable too.

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As said the applicants have conceded, all the other claims stand or fall with claims 1 and 14 and, accordingly, I find nothing that is patentable in any of the claims. I have read the description, but cannot see any feature that could be imported into the claims to get round the conclusions I have reached, and therefore I see no point in allowing an opportunity for further amendment. Accordingly, I refuse this application.

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It finally remains for me to say that, under the Practice Direction to Part 52 of the Civil Procedure Rules, you have 28 days if you wish to lodge an appeal with the High Court.

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