



medical procedures they've carried out, with a view to making billing easier.

- 5 As described, the system operates on a single general purpose computer or on a networked system. In use, the physician selects, using a series of drop-down menus, descriptors related to the medical procedure that he's carried out and the system generates corresponding codes. It is stated on page 7 of the application that, as the physician records the procedure, "an anticipatory interface .. emulates a typical procedural workflow and a clinician's thought processes .. automatically adapting to each piece of information that is input by the physician". As selections are made, a narrative is constructed, which in its final form is called the "natural procedure label" for the procedure. Concurrently, the related codes are collated and may be used for billing. Data related to procedures and descriptors is stored in a database.
- 6 Advantages of the system are also described on page 7, namely that it "reduces the time spent by the physician paging through a maze of screens to find the correct place to record information... scrolling through dozens of pull-down menus or ... reading through endless lists of words in search for terminology appropriate for the procedure at hand."
- 7 In the application as it stands amended on 15 May 2006, there are nine claims of which claims 1 and 9 are independent. Claim 1 reads:

A documentation system for medical procedure descriptions, the system comprising:

- (a) a computing system, which includes;
- (b) a user interface for recording a medical procedure description, said user interface arranged to construct a natural procedure label, wherein said natural procedure label concisely summarizes said medical procedure description;
- (c) a first database connected to said user interface, said first database comprising a plurality of medical procedure descriptions and programming logic;
- (d) a second database connected to said user interface, said second database comprising a plurality of procedures terms and attributes representations;
- (e) an anticipatory user interface for accessing said procedure terms and attributes representations;
- (f) an ontology inference engine residing on said user interface;
- (g) a third database, said third database comprising a plurality of non E & M CPT codes; and
- (h) means for automatically selecting a plurality of non E & M CPT

codes from said third database and associating said non E & M CPT codes to said natural procedure label, wherein said natural procedure label and said non E & M CPT code concisely summarize said medical procedure description.

Claim 9 reads:

A method for documenting a medical procedure, comprising steps of:

- (a) recording a medical procedure description;
- (b) accessing a first procedures representations database having a plurality of procedure term and attributes representations;
- (c) selecting a procedure term and attributes representation from the first procedure representations database, the selected procedure term and attributes representation associated with the medical procedure description; and
- (d) constructing a natural procedure label using the recorded medical procedure description, wherein the natural procedure label concisely summarizes the medical procedure description;
- (e) accessing a second database of procedure terminologies;
- (f) accessing a third database of non E & M CPT codes;
- (g) automatically selecting a plurality of non E & M CPT codes from the third database of non E & M CPT codes; and
- (h) associating a non E & M CPT code to the natural procedure label, wherein the natural procedure label and the non E & M CPT code concisely summarize the medical procedure description.

## **The law**

8 The relevant provisions of section 1 are:

*1.-(1) A patent may be granted only for an invention in respect of which the following conditions are satisfied, that is to say -*

- (a) the invention is new;*
- (b) it involves an inventive step;*
- (c) .....*
- (d) the grant of a patent for it is not excluded by subsections (2) and (3) below;*

*and references in this Act to a patentable invention shall be construed accordingly.*

*(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.*

9 These provisions are framed so as to have the same effect as Article 52 of the European Patent Convention, which reads:

*(1) European patents shall be granted for any inventions which are susceptible of industrial application, which are new and which involve an inventive step.*

*(2) The following in particular shall not be regarded as inventions within the meaning of paragraph 1:-*

- (a) discoveries, scientific theories and mathematical methods;
- (b) ...
- (c) schemes, rules and methods for performing a mental acts, playing games or doing business, and programs for computers;
- (d) ...

*(3) The provisions of paragraph 2 shall exclude patentability of the subject matter or activities referred to in that provision only to the extent to which a European patent application or European patent relates to such subject matter or activities as such.*

*(4) ...*

### **The issues**

10 In the *CFPH* judgment, cited by the applicant, a two step test is proposed to determine questions of exclusion under section 1(2), namely:

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

(2) 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.

11 Having regard to this approach, the examiner has concluded that although the application may provide an advance as a mental act, method for doing business or computer program as such, it provides no advance in a non-excluded field and is therefore excluded from patentability.

- 12 The applicant has submitted a detailed response. On the first *CFPH* step, the applicant sets out what, having regard to novelty and inventive step, it considers distinguishes the invention from the prior art cited by the examiner. The applicant also argues that the invention is industrially applicable.
- 13 On the second step, the applicant makes the general point that “As set out in *CFPH* ..., the scope of limitations “as such” should be determined based on the public policy reasons behind the conclusions”, but goes on to say that “It is believed that the judge’s comments on the breadth of the “as such” exceptions are merely *obiter dicta* and therefore not binding”.
- 14 On the specific exclusion of computer programs as such, the applicant argues that these should be treated in the same way that mathematical methods are treated, namely that a pure method is barred from patentability, but its application is not. In support, the applicant points out that in article 52 of the European Patent Convention, the provisions of paragraph 52(3) apply to the whole of paragraph 52(2), that is to say the same language is used in relation to the meaning of “as such” in each of clauses (a) to (d) of article 52(2). The applicant concludes that the computer programs as such exclusion should bar a general computer programming technique but not a practical application of that technique, in the same way that a practical application of a mathematical method - or a scientific discovery - is not excluded.
- 15 On the specific exclusion of methods of doing business as such, the applicant argues that this exclusion is aimed at excluding general business ideas or processes so that third parties are not prevented from being able to compete in a new business area. By contrast, in the present case, third parties would not be prevented from “providing mechanisms for recording all or any information in any or all manners. Rather, they could use a non-computer implemented method or could devise a different computer implemented method. “

## **Conclusions**

- 16 The first point to consider is the status of the comments in the *CFPH* judgement on the breadth of the “as such” exceptions, the applicant having , accepted that “As set out in *CFPH* ..., the scope of limitations “as such” should be determined based on the public policy reasons behind the conclusions”, but going on to argue that these comments are merely *obiter* and therefore not binding.
- 17 Section III of the judgement is headed “THE LEGISLATION” and runs from paragraph 22 to paragraph 42. It can be looked at as comprising two parts. The first part runs from paragraph 22 to paragraph 27 and covers the particular requirements and interpretation of the Patents Act 1977 and the European Patent Convention. There is a single paragraph, number 25, headed “As such” which deals with the interpretation of that wording. The second part runs from paragraph 28 to paragraph 42 and examines why the various items listed in Article 52 are excluded from patentability, a good portion being devoted to underlying questions of public policy.

- 18 Sections IV and V of the judgement are headed “UK PATENT OFFICE vs THE EPO” and “THE CASE LAW”. Here differences between the approaches of the two Patent Offices, particularly as reflected in the case law, are drawn out. Although, it is noted at paragraph 58 that “both systems should produce identical results *if properly applied*”, the judgement comes down in favour of the approach followed by the EPO, and advocates looking at all the requirements for patentability set out in section 1(1) together, using the two step test already noted above and which is set out at paragraph 95 of the judgement.
- 19 It is my understanding that the principal objective of section III is to provide a coherent synthesis of the development of the law to date; not to make any departure therefrom. Where the judgement does make a departure – at least so far as practice in the United Kingdom is concerned – is in advocating the two step test, although no change in the outcome is envisaged. The critical point is, in short, that the boundary of what is patentable remains unchanged. I therefore attach no weight to the applicant’s obiter point.
- 20 I turn now to the detail of specific exclusions, and here I accept the applicant’s argument in respect of how mathematical methods and scientific discoveries are treated under section 1(2) - but only up to a point. Thus whilst a claim to a mathematical method *per se* will be excluded, the application of that mathematical method may or may not be patentable, depending on the nature of the application, namely whether or not the application is itself in a non-excluded area. Thus for instance in the well known case of *Vicom Systems Inc* [1987] 1 OJEP 14 (T208/84), which is referred to in *CFPH*, a method of image processing using a mathematical method was allowed, since the image processing performed was a technical (ie non-excluded) process which related to the technical quality of the image.
- 21 As to computer programs, the argument that a general computer programming technique may be excluded but not a practical application of that technique is again fine but only as far as it goes. That this argument is only valid if the application of that technique is in a non-excluded area is well settled law. In *CFPH* itself for instance, the systems in question – which found practical application in betting systems – were held to be new and not obvious, but in the field of business methods, and therefore excluded from patentability.
- 22 In short, I agree with the applicant that a practical application may rescue an otherwise excluded invention, but only if that application is itself in a non-excluded area. I should add that there is nothing new about this interpretation of how to apply section 1(2) and article 52 in practice; it precedes but is wholly consistent with the *CFPH* approach.
- 23 Applied to the present case – if it is accepted that what is claimed is novel, inventive and capable of industrial application – then the question that has to be addressed remains, as per the second step of *CFPH*, whether or not there is a contribution in a non-excluded field. I agree with the applicant that the invention finds practical application. However that application is in the field of manipulating data using known hardware. There is no product step, for

instance the step of producing a bill reflecting the treatment given to the patient, but that in any case would not to my mind rescue the situation.

- 24 What we have is a known single general purpose computer or networked system programmed to carry out a particular method. In this method, a user selects, using a series of drop-down menus, descriptors related to a medical procedure, the system generates corresponding codes, a narrative is constructed, which in its final form is called the “natural procedure label” for the procedure, and related codes are collated and may be used for billing.
- 25 Whether or not this method itself is new and not obvious, it seems to me to fall wholly within the ambit of a “scheme rule or method for performing a mental act .. or doing business” and as such is excluded from patentability under section 1(2) – the second step of *CFPH*.
- 26 However, regarding methods of doing business, the applicant's argument that this exclusion is aimed at excluding general business ideas or processes finds support I think in *Macrossan's Application* [2006] EWHC 705. Here at paragraphs 28 to 30, Mann J distinguishes between providing particular business services or products – which he held was not the exclusion that the Act was aimed at; and the more abstract or underlying abstraction of business methods such as market making techniques, ways of carrying out auctions, the concept of the joint-stock company, or the operation of a pensions scheme – which he felt was what the exclusion was aimed at. I am not sure that in the present case there is the necessary level of abstraction or generality to qualify as a business method on this basis. This is a point clearly made by the applicant.
- 27 However, it seems to me that the method in any case falls within the mental act exclusion. The core of the invention is to manipulate, code and collate certain items of information or data representing medical procedures. The act of processing this information or data seems to me to constitute a mental act, since without a computer a skilled individual would do the same thing in much the same way.
- 28 Looked at from a different perspective, the advance might alternatively be regarded as the computer program used to execute the method, and I would expect – given the complexity involved - that there is a high probability of this being both novel and inventive. As already discussed, computer programs may or may not be excluded from patentability. To paraphrase *CFPH*, they are not excluded if they relate to better rules for governing an automatic pilot or the manufacture of soup for instance; they are excluded if they relate to better rules for carrying out something in an excluded area. Here it seems to me we have no more than the automation of, if not a business method, then a mental act, and in consequence exclusion from patentability as a computer program *as such*.
- 29 For completeness I should add that whatever the particular exclusion or exclusions that might apply, I can find no advance in a non-excluded field that the second step in the *CFPH* requires for an invention to be patentable.

## **The technical contribution approach**

30 In the *CFPH* judgement, the two step approach quoted above is advocated in order to avoid having to make difficult decisions about what is meant by “technical”, necessary when the test for patentability is based on an assessment as to whether or not an invention made a technical contribution. *CFPH* does not jettison this approach. For instance it is stated at paragraph 97 of the judgement that

it will often be possible to take a short cut by asking “Is this a new and non-obvious advance in technology?” That is because there can often be universal agreement about what is “technology”

31 I am not sure whether there would be “universal agreement” in the present case, but I have to say that the idea of putting some software up onto a known computer or networked computer system in order to encode and manipulate data does appear to me to be inherently and transparently non-technical as the term has come to be understood. And this conclusion stays the same in my view even if the method executed by the software is itself new and not obvious, since again this would provide no technical contribution. On this basis too then I find the application excluded from patentability.

## **Other recent case law**

32 There is a substantial body of case law subsequent to *CFPH* which has not been considered in the prosecution of this application, notably *Halliburton Energy Services Inc v Smith International* [2006] RPC 2, *Shopalotto Ltd's Application* [2006] RPC 7, *Crawford's Application* [2006] RPC 11, and *Research in Motion UK Ltd v Inpro Licensing* [2006] EWHC 70. However I do not believe that these judgments (or *Macrossan* which I have taken into account above in interpreting what is meant by a method of doing business) conflict with the *CFPH* approach that I have followed here . Moreover I note that the judgments in both *Crawford* and *Shopalotto* confirm that the *CFPH* approach is not inconsistent with the technical contribution approach which I have also followed.

## **Decision**

33 I have concluded that there is no advance in a non-excluded field and that the invention is therefore excluded from patentability under section 1(2)(c). I can find no subject matter in the application that could form the basis for a patentable invention, and I therefore refuse the application under section 18(3).

## **Appeal**

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



**DAVID BARFORD**

Deputy Director acting for the Comptroller