

0153/97

PATENTS ACT 1977

Mr Edwards
3R56

IN THE MATTER OF

Application No. 9226557.8

in the name of Maurice Michael Cotterell

DECISION

This application was filed on 21 December 1992 in the name of Maurice Michael Cotterell and relates to a method for decoding information contained within archaeological carvings and artifacts. The application was published on 22 June 1994 with amendments to the claims that were filed on 8 March 1994. Substantive examination of the application was requested on 30 August 1994.

The first examination report under section 18(3) was issued on 19 December 1995 and the examiner considered that the amended claims 1 to 6 did not comply with section 1 of the Act. In particular, he reported that "claim 2 at least would appear to lack novelty insofar as it appears to cover merely particular representations of an encoded archaeological design, picture or pattern which would for example be present in books and other publications. Further, claims 1 and 3 to 6 as well as claim 2 appear excluded from patentability in they could be described for example as merely a discovery, an aesthetic creation, a method of performing a mental act or a presentation of information."

The applicant filed a revised statement of claim on 19 March 1996 to which the examiner responded on 8 May 1996 and reported that "...the claims do not comply with section 1 of the Patents Act in that (a) the claims appear related to a mental act and (b) at least claim 3 would appear to lack novelty". He referred the applicant to paragraph 1.29 of the Manual of Patent Practice and pointed out that "patents must provide a technical contribution rather than just an intellectual contribution".

The applicant's formal reply of 2 October 1996 argued that the "results of the process, (the increase in image volume) could not be achieved without the non-intellectual facilitating components involved in the process. The method steps in themselves are not mental acts.....The claims are intended to cover those artefacts which are 'in principle' beyond the intellectual capabilities of the best in the field, without recourse to the process". In order to overcome the examiner's objection, the applicant amended claim 1 to "exclude all archaeological artefacts which may be decoded using a mental act".

The applicant requested the opportunity to demonstrate the decoding process before the Patent Office, prior to refusal of the application, should his arguments fail to persuade the examiner. The examiner subsequently re-stated his objections in an official letter dated 14 November 1996. In particular, he stated that "the claims do not comply with section 1 of the Act.....they relate to a discovery, a method of performing a mental act and the presentation of information. Furthermore it is not clear the claims are capable of industrial application. Finally claim 1 lacks clarity.....The step of scanning at various relative orientations of facsimile with respect to line drawing is considered to be wholly a mental act just as indicated in your letter that the perception of a television picture requires a mental act. The reference in claim 1 to excluding such designs, pictures or patterns which may be decoded using a mental act is therefore obscure.....Further claim 1 is concerned with a presentation of information as the decoding could be said to represent an intellectual contribution rather than a technical contribution unlike in the Merrill Lynch case (*Merrill Lynch's Application* [1989] RPC 561) referred to in your letter".

The applicant formally requested a hearing on 13 January 1997 in order to demonstrate his invention and to persuade, beyond reasonable doubt, that the invention is not wholly 'mental' in substance and that industrial application by way of manufactured products is possible. The hearing was appointed for 3 March 1997 and was attended by the applicant, who was unrepresented, and the examiner. A shorthand writer was also in attendance. At the hearing, the applicant provided both written and oral responses to the official objections in addition to demonstrating his decoding process on various artefacts. I reserved my decision until after I had received the transcript of the hearing.

I have now considered all the arguments put forward by the applicant and have had the advantage of being able to refer to the verbatim report of the hearing made by the shorthand writer. I am of the opinion that the grant of a patent for the invention claimed in the application is excluded by virtue of section 1(2) of the Patents Act 1977. The reasons for my decision are set out below.

Section 1(2) of the Patents Act 1977 provides a non-exhaustive list of items which are excluded from patentability. However, the applicant maintained that (i) the process is a new process which enables the location, and hence release, of previously encoded information which would otherwise remain hidden, (ii) the process makes a technical contribution in that it allows the release of substantially more information than is possible without the use of the process, (iii) the process achieves what has never been achievable before and therefore must be novel, and (iv) the process requires the manufacture (or generation) of an image and additionally a facsimile of the same image, inversion of the facsimile, relative movement of the images in the same plane and mental reasoning to identify an image once it has been located.

Claim 1 in its amended form reads as follows:

"A method of treating an encoded Archaeological design, picture or pattern for decoding or elucidation purposes, the method comprising the steps of preparing a line drawing of the said design, picture or pattern and a facsimile thereof on a translucent substrate inverting said facsimile and overlaying it on said line drawing, relatively moving said line drawing and said facsimile so that the respective designs, pictures or patterns are disposed at different orientations to one another or are displaced one with respect to the other, and scanning the overlaid designs, pictures or patterns to identify elements of resultant new designs or patterns which are revealed as composite designs or pictures and which permit interpretation of the encoded design, picture or patterns excluding such designs, pictures or patterns which may be decoded using a mental act."

At first sight, the invention as claimed appears to cover the mere discovery of encoded information, the presentation of information, and a method of performing a mental act. However, in accordance with general principles laid down in a number of judgments and decisions, I should construe the invention as a whole, without regard to its constituent features or integers, and determine whether the whole invention solves a technical problem, or makes a

contribution to the art in a non-excluded field, or whether the invention is, in substance, no more than an excluded item or is merely an excluded item in disguise. Therefore, I have to consider whether the application of the method of the invention produces a product or process which is different from the prior art at a technical rather than an intellectual level.

In my opinion, the invention as a whole requires mental activity which involves a significant level of abstraction and intellectual generality. The overall process involves the decoding or elucidation of an encoded archaeological design, picture or pattern by an operator superimposing two mirror images of the design, picture or pattern, manipulating one with respect to the other, and scanning the resultant image. In an embodiment, the superimposition of the mirror images provides a line of symmetry and the formation of further designs, pictures or patterns as the images are manipulated about an epicentre of rotation by the operator. However, what is achieved by these process steps does not lead to a definite result which is achievable by any operator carrying out the process. Instead, and by admission of the applicant, only skilled operators with the requisite archaeological knowledge would be able to assess and recognise elements of resultant new designs, pictures or patterns revealed by the process. What is being carried out in the mind is a comparison of the composite designs, pictures or patterns with recognised designs, pictures or patterns or their representations. In my opinion, the contribution to the art is subject to mental interpretation and presentation in abstract ways. Therefore, the invention as claimed in claim 1 is not patentable.

Considering now the remaining claims, claim 2 includes the step of selectively colouring or shading elements, areas or zones of the line drawing of the design, picture or pattern and its facsimile before superimposition one on the other. Claim 3 covers the combination of a line drawing of an encoded archaeological design, picture or pattern and a translucent facsimile thereof when used in the method of claim 1. Claim 4 covers the colouring or shading of selected areas of the drawing and the facsimile of claim 3 in order to assist in the definition or recognition of the designs, pictures or patterns revealed by the scanning step of the process. The mere step of colouring or shading selected elements, areas or zones of the line drawing and facsimile requires an intellectual contribution in carrying out the selection process. Although the combination of a line drawing and translucent facsimile, whether or not they are coloured or shaded, may be matter suitable for copyright or design protection, it is not considered suitable matter for patent protection. Therefore, I do not consider there is anything inherently patentable in these claims.

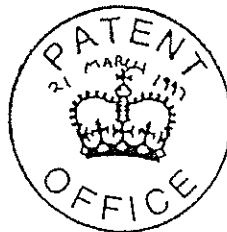
As demonstrated by the applicant at the hearing, the designs, pictures and patterns which result from the manipulation of the superimposed mirror images are symbols or caricatures and are themselves abstractions of designs, pictures and patterns. Much appears, therefore, to be left to the interpretation by an operator of the images resulting from this manipulation and the subsequent scanning process. The overall process of treating an encoded archaeological artefact does not have a concrete physical end result, but instead is an intellectual abstraction in that the process concerns the intellectual content of the images as in *Fujitsu's Application* [1996] RPC 511.

Although *Fujitsu's Application* is related to a computer programmed to display and manipulate images of crystalline structures, there is similarity in the processes involved in that the images are rotated under the control of an operator and superposed prior to a selection process by the operator. Laddie J upheld the hearing officer's rejection of the application on the ground that it was no more than a method of performing a mental act and what was produced was not an inevitable result of taking a number of defined steps but was determined by the personal skill and assessment of the operator. As such it consisted in substance of a scheme or method for performing a mental act and was unpatentable.

Since the artistic drawings of the artefacts and copies thereof are not, in themselves, susceptible of patent protection and since image scanning is a known process (as shown by the US patent documents cited by the examiner at the preliminary search stage), none of the claims covers subject matter which is patentable. Moreover, as I can see nothing else in the description which could support a claim which did not contravene section 1(2) of the Act, I hereby refuse application number 9226557.8.

Any appeal from this decision must be lodged within six weeks of the date of this decision.

Dated this 21st day of March 1997



D J JERREAT

Principal Examiner, acting for the Comptroller