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PATENTS ACT 1977

Pat/Linda
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IN THE MATTER OF

Patent Applications Numbers
9710880.7 and 9710887.2
in the name of National
Computer Systems Inc.

DECISION

Applications 9710880 and 9710887 were filed on the 27th May 1997 having been divided out of application number 9402185.4 under section 15(4). The two applications were published under the numbers 2310515A and 2310518A respectively on the 27th August 1997. During the course of substantive examination the examiner objected that the inventions claimed in both applications could not be patented because they amounted to no more than a program for a computer and were therefore excluded by section 1(1)(d) and 1(2)(c), and that the invention claimed in the second of the two applications could not be patented because it was no more than the presentation of information and was therefore also excluded by section 1(2)(d). The applicant contested the objections and in the absence of agreement the matter came before me at a hearing on the 4th November 1997 when the applicant was represented by Mr D. C. O'Connell of Haseltine Lake & Co.

Both inventions relate to a system for facilitating the marking of answer papers, for example the answer papers of candidates in an examination. The papers are scanned into a computer system and the resolver marking the test sits in front of a screen on which images of the answer papers are displayed. In the first application, 9710880, a check is made on the accuracy of the resolver. One of the answer papers shown to the resolver has, unknown to him or her, already been marked by quality control personnel. The system compares the score given by the resolver with the "correct" score (or an allowable range of scores) assigned by the quality control personnel and reports if there is a discrepancy. In the second application, 9710887, when an answer to be marked is displayed, rules for the marking of the answer can

be displayed simultaneously on the screen to aid the resolver.

After the hearing had been appointed but before it was held, the applicants filed amended claims as follows:

Application 9710880 :

1. A system for evaluating the performance of test resolvers, the system comprising:

a scanner operable to scan answers to test questions so as to form respective image data portions relating to those answers, each such image data portion comprising an electronic representation of at least a portion of a test answer sheet;

storage means for storing the image data portions;

transmit means operable to transmit the image data portions from the storage means to a test resolver;

quality control means operable to store quality item data having predetermined test score data associated therewith, the quality control means also being operable, at scheduled times during a scoring process, to transmit the quality item data, amongst the image data portions, to the test resolver;

receive means for electronically receiving resolver test score data relating to respective image data portions from the test resolver, and for electronically receiving resolver test score data relating to the quality item data from the test resolver;

comparison means operable to compare the received resolver test score data relating to the quality item data with the associated predetermined test score data; and

reporting means operable to signal that a discrepancy exists between the received resolver test score data and the predetermined test score data.

2. A system for evaluating the performance of test resolvers by routing quality-control questions for scoring to test resolvers substantially as hereinbefore described with reference to Figs. 1 to 4 and 11 of the accompanying drawings.

Application 9710887 :

1. A system for providing scoring rules to test resolvers, the system comprising:

a scanner operable to scan answers to test questions so as to form respective image data portions relating to those answers, each answer comprising an electronic representation of at least a portion of a test answer sheet;

image storage means for storing the image data portions;

transmit means operable to transmit image data portions to a test resolver for display to that test resolver;

rules storage means for storing data relating to scoring rules, each such rule corresponding to at least one test question;

rules processing means operable, in response to a request for scoring rules from a test resolver, to determine which of the stored rules data is associated with the particular image data portion currently displayed to that test resolver, to retrieve that stored rules data, and to transmit the retrieved stored rules data to the test resolver for display to that test resolver; and

receive means operable to receive resolver test scores from the test resolver relating to respective test answers.

2. A system for electronically and dynamically providing scoring rules to test resolvers to assist the test resolvers in scoring test items to which the scoring rules apply, substantially as hereinbefore described with reference to Figures 1 to 4 and 13 of the accompanying drawings.

At the hearing Mr O'Connell tacitly accepted that the inventions consisted of a conventional computer system with a novel program and suggested, and I agreed, that the applicable law is that set out in *Merrill Lynch's Application [1989] RPC 561*, in particular at page 569, and in *Fujitsu Limited's Application 1997 RPC 608*, and that the criterion to be applied in deciding whether or not the inventions claimed in the two applications in suit were or were not excluded by section 1(2) was whether or not the substance of the inventions involved a technical contribution.

Against this background Mr O'Connell argued in relation to the amended claims of the first application, 9710880, that the function being performed by the system was not of an intellectual character but was mechanical in the sense that it involved no subjective intellectual input but was rather a purely automatic, technical process of comparing the resolver's marking with the quality control marking previously entered into the system. In this respect he referred me to lines 10/11 of the amended claim 1 (in the form set out above) which relate to means for transmitting quality data to the test resolver, to line 12 which relates to means for receiving resolver test score data, and to lines 15/16 which relate to means for comparing the received resolver test scores and the associated quality data. In Mr O'Connell's submission, these features amounted to more than the mere computerisation of existing moderating arrangements for assessing resolvers, which he accepted would be excluded, but were a mechanism for carrying out an evaluation of the resolver in a different, technical way.

With respect to Mr O'Connell, I do not accept that this is right. While I agree of course that the system claimed is a technical artefact in the form of a conventional computer operating in a new way, and to that extent involves a technical difference, that of itself in my view is not sufficient. Indeed, if that were sufficient then conventional computers with a novel program causing them to operate in a new way could never be excluded and it is apparent from the judgment in *Merrill Lynch*, specifically at page 569, lines 2 to 6, that this is not so. On the contrary, I take it from the judgements in *Merrill Lynch* and in *Fujitsu* that something further is needed from the combination of the computer and the program and that the substance of the invention claimed, taken as a whole, must provide a technical contribution over and above the mere use of technical means within the computer to perform a specified task. In the application in suit I see no such contribution. In the absence of any description to the contrary it must be assumed that the computer is performing the tasks it is required to do in a technically conventional way. Consequently there is no technical contribution there. Moreover, the tasks being performed, namely the comparison of two items of data representing examination markings, are to my mind of an inherently intellectual rather than technical nature. Therefore, I conclude that the invention claimed is excluded by section 1(2)(c) because it amounts to no more than a program for a computer.

In relation to the second application, 9710887, Mr O'Connell argued that the particular features set out in the amended claim 1 in relation to the "rules processing means" increased the efficiency of the marking process in two ways. While he did not seek to suggest that the first of these provided a technical contribution, he argued that the second did.

The first improvement was that displaying the rules to be used in the marking process allowed resolvers to increase their speed because they would not need to waste time by looking things up in instruction books or the like. Mr O'Connell however accepted that this was simply the kind of advantage that would be expected to flow from the use of a computer and referred me to *Fujitsu Limited's Application* where 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" for modelling crystal structure combinations which avoids labour and error. But those are just the sort of advantages that are obtained by the use of a computer program. Thus the fact that the patent application provides a new tool does not solve the question of whether the application consists of a program for a computer as such or whether it is a program for a computer with a technical contribution."

In the light of these remarks Mr O'Connell indicated that he accepted that his first argument did not allow him to claim that the exclusion of section 1(2) did not apply.

Against that however, Mr O'Connell pointed out that, as now claimed, the rules processing means operated to select which of the stored rules were associated with the particular image data currently being displayed to the test resolver and displayed only the appropriate rules. In Mr O'Connell's submission this amounted to more than simply the sort of advantage conferred by using a computer. While he accepted that simply presenting all the rules to the resolver, thereby forcing the resolver to locate the correct rule, would amount to nothing more than the sort of thing that would be expected from the use of a computer, he argued that the automatic selection and display of the appropriate rule by the computer meant that the invention involved a technical contribution because it was operating in a technically different

way.

Again, with respect to Mr O'Connell, I do not accept that this is right. The selection of the appropriate rules to go with the answers being displayed is to my mind a purely intellectual matter. As I understood him, Mr O'Connell was not arguing that the particular technical mechanism or process used in the computer to make the selection was technically different; indeed as I have already said, the absence of any description in the specification to this effect means that the technical process involved must be presumed to be conventional. Rather Mr O'Connell was I think arguing that the fact that the appropriate rules were automatically selected and displayed was of itself a technical contribution but again, as I have said, in my view the selection of rules to go with a particular answer is a purely intellectual and not a technical matter. As before I accept of course that the selection and display of the appropriate rules is done by a technical means, namely a programmed computer operating in a new way, and to that extent involves a technical difference. But for exactly the same reason as I give above in relation to the first application, I do not accept that this of itself can provide a technical contribution of the sort required. Consequently, again I must look further and having done that, I can see no technical contribution provided by the invention and conclude that the invention claimed is excluded by section 1(2)(c) because it amounts to no more than a program for a computer.

In relation to this, second application, 9710887, the examiner had also objected that the invention amounted to no more than the presentation of information and was therefore excluded by section 1(2)(d). When I put this to him Mr O'Connell took the view that regardless of whether the objection was under section 1(2)(c) or 1(2)(d), the criterion, namely whether or not the invention provided a technical contribution, was the same so the precise legal nature of the resulting objection was wholly academic. While I am inclined to agree with this, formally I am still left with an outstanding legal objection under section 1(2)(d). Although strictly I do not need to decide this matter because I have already decided that the invention is excluded by section 1(2)(c), for completeness I will say that I do believe that the essentially intellectual nature of the substance of the invention in suit is such that it is excluded by section 1(2)(d) as no more than a presentation of information and that accordingly, the

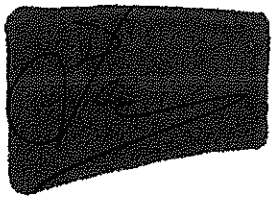
invention should also be excluded for this reason.

While I have so far considered only the main claims of the two specifications, the nature of the objections to these claims has meant that I have had to look at the substance of the inventions, and thus at the whole of the subject matter described. On this basis, I see nothing further that is claimed in the remaining omnibus claims which avoids my finding that the inventions are excluded by section 1(2) and I therefore conclude that the inventions claimed in these claims are also excluded. Moreover, because the omnibus claims in effect cover all the features described in the specifications in suit which relate to the inventions claimed in the main claims in question, it follows that there is no purpose in my giving the applicants an opportunity to amend their claims with a view to avoiding my findings because I can see no way in which the claims relating to these inventions could be amended to this end.

Accordingly, I hereby refuse the two applications in suit, 9710880.7 and 9710887.2, under section 18(3).

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

Dated this 10th day of November 1997.



D M HASELDEN
Principal Examiner, acting for the Comptroller.

THE PATENT OFFICE