

Commissioner’s Decision # 1265
Décision du Commissaire # 1265

TOPIC: B00, J00, O
SUEJECT: B00, J00, O

Application No: 2,307,153
Demand no: 2,307,153

COMMISSIONER'S DECISION SUMMARY

C.D. 1265

App'n 2,307,153

Obviousness, indefiniteness, lack of subject matter [Section 2]

The examiner rejected this application on the basis that the invention claimed was obvious at the claim date over cited prior art consisting of one Canadian patent and three United States patents. The Examiner also rejected the claims as being indefinite because they do not include essential features. The application was rejected as not being directed to subject matter which falls under the definition of invention. The Board found that the applicant was claiming an invention which was not obvious in view of the cited art, that all of the essential components of the invention had been included in the claims and that the subject matter fell under the definition of invention.

The application was returned to the examiner for further prosecution.

IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application 2,307,153 having been rejected under Rule 30(4) of the Patent Rules, the Applicant asked that the Final Action of the Examiner be reviewed. The rejection has consequently been considered by the Patent Appeal Board and by the Commissioner of Patents.

The findings of the Board and the ruling of the Commissioner are as follows:

Agent for Applicant

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This decision deals with the Applicant's request for a review by the Commissioner of Patents of the Examiner's Final Action dated December 11, 2002, on application 2,307,153, filed on April 28, 2000 and entitled "Light Fixture Management System". The inventor is R. Clark

Jeffrey and the applicant is Northern Light Technology Group Inc..

A hearing before the Patent Appeal Board was held on October 8, 2003. Appearing on behalf of the Applicant was Ms Jenna Wilson from the firm of Dimock Stratton Clarizio LLP. Representing the Patent Office were Mr Mazan Hijazi, the Examiner in charge of the application and Mr Claude Mathieu, Section Head.

The application relates to a system used to track the maintenance and repairs of light fixtures in a building or group of buildings.

Figures 1 and 1a of the application show a part of the system in association with a light fixture.

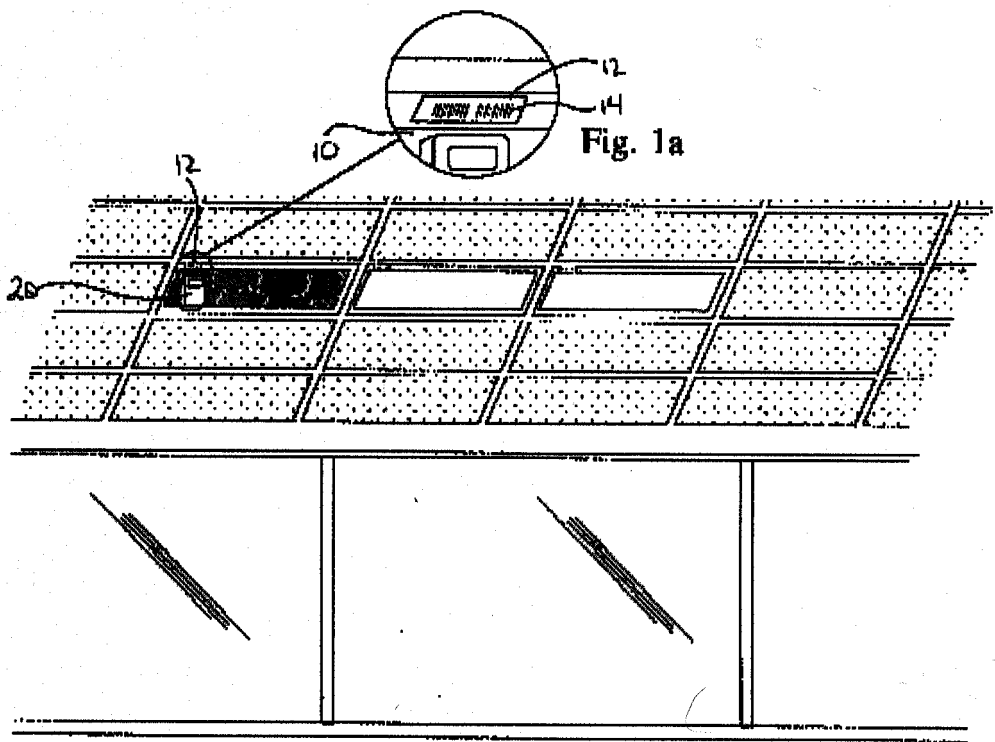


Fig. 1

In figures 1 and 1a, a label 12 containing information unique to a light fixture 10 is placed on or near that light fixture. An observer, such as a building electrician or caretaker, making a tour of the building carries a device 20 which can read the label associated with a light fixture that is in need of repair. When the worker has completed the tour, the information gathered by the reading device is downloaded into a computer which then generates a report setting out information concerning all light fixtures which are in need of repair. The computer contains a data base which holds information about each light fixture in the building as well as information about previous repairs. The report sets out the most efficient route to be taken by maintenance staff who will do the repairs.

There are 19 claims in the application. Claim 1 is an independent claim which is directed to a light fixture management system and claims 2 to 9 depend directly or indirectly on claim 1. Claim 10 is an independent claim which claims a method of managing a plurality of light fixtures and claims 11 to 19 depend either directly or indirectly on claim 10.

Claim 1 reads as follows:

A light fixture management system, comprising

a plurality of labels each containing unique indicia,

a portable reader for reading the indicia on the labels,

a microprocessor appliance comprising a database, for receiving information collected by the reader and associating the unique indicia with corresponding information in the database,

wherein when the plurality of labels are each associated with one of a plurality of light fixtures, the microprocessor appliance can generate a report with information specific to light fixtures associated with the labels read by the reader and

wherein the report comprises a repair task route specifying a sequence of fixture maintenance based on the relative locations of the light fixtures associated with the labels read by the reader.

On December 11, 2002, the Examiner issued a Final Action in which he rejected all of the claims as being obvious over cited prior art, and as being indefinite for failing to include all of the essential elements. All of the claims and the application were also rejected because they contain no patentable subject matter. The Examiner stated that there are 21 claims in the application but, as noted above, there are 19 claims.

In the Final Action, the Examiner cited the following references:

<u>Canadian patent</u>		
1,261,470	September 26, 1989	Markman
<u>United States patents</u>		
5,803,906	September 8, 1998	Pratt et al
6,031,621	February 29, 2000	Binder
5,120,942	June 9, 1992	Holland et al

USP 5,803,906 discloses a method and system for providing health histories of animals. Each animal carries indicia means such as a bar code tag. A database, which contains the health history of each animal, is stored in a computer. When an animal is to be treated, it is identified by reading the bar code tag. This identification is supplied to the computer which retrieves that animal’s health history from the database and displays it at the treatment site. As the animal is treated, the database is updated with treatment information.

USP 6,031,621 discloses a system which is used to collect warranty information from a printer. The required information is printed on a self

test page and is encoded in a bar code. The warranty information is collected by using a bar code reader to read the bar code on the self test page.

USP 5,120,942 discloses a system which is used by a security guard as he/she conducts a security tour. Bar code labels are attached to check points along the tour route and the guard carries a bar code reader. During the tour, the guard uses the reader to read the code at the check points and at the end of the tour, a report of check points and times can be generated.

Canadian patent 1,261,470 discloses a system which is used to control inventory and generate reports, especially in the dry-cleaning industry. When a customer brings in articles to be dry cleaned, data about the customer, the type of items, and the cleaning operation to be performed are entered into a computer. A label containing information unique to that particular transaction is generated and is affixed to the items to be cleaned. The label contains a bar code which can be scanned at locations throughout the dry-cleaning facility. The data are used to keep track of inventory and generate management reports.

In his Final Action, when discussing obviousness, the Examiner stated, in part:

The difference between Markman and claim 1 is in the articles to be scanned. Because scanners read bar codes, which can be attached to a wide variety of articles, scanners have widespread utility. Sticking bar code labels on different articles does not make the new application patentable since bar code labels/readers have many applications. Movable items are scanned by a fixed reader and fixed items are scanned by a movable reader as shown in the cited references. Portable scanners are just as common as fixed scanners.

Claims 1 to 21 do not comply with Section 28.3 of the Patent Act. The subject matter of claims 1 to 21 would have been obvious on the claim date to a person skilled in the art having regard to Markman and common knowledge of scanning management systems shown by any one of Pratt et al., Binder and Holland et al.

Bar code readers for reading indicia on labels are widely used. Microprocessor appliances comprising a database for storing the scanned information and associating the same with information in the database and subsequent generation of a report are also commonly used modes of operation as shown in the references. It is obvious that the bar code technology has innumerable applications as a result of the development of computer technology. Such variations in the application of the technology are better described as a workshop improvement.

In its reply, the Applicant had the following to say about obviousness:

The Examiner has objected to the claims on the basis that their subject matter is obvious in view of Markman and the common knowledge of scanning systems as exemplified in Pratt et al., Binder, and Holland et al. However, Markman, even when combined with the other references, fails to lead a person skilled in the art to the present invention.

Not only are the inventory items in Markman (mobile articles of clothing brought to a dry-cleaning establishment) unlike the labelled fixtures in the present invention (immovable light fixtures), but the nature of the indicia is different. The indicia in Markman are generated on a per-transaction basis only when a customer submits a garment to be dry cleaned (Markman, page 4, lines 26-33). When the garment is returned to the customer, the customer would remove any label bearing indicia. If the customer were to bring the same garment back to the dry-cleaning establishment for another cleaning, following the teaching in Markman, a *new* indicia would be generated as this event would comprise a new transaction.

All of the references cited by the Examiner have as a common feature the use of a bar code reader which reads a bar code containing information which is unique to one thing, an animal, a printer, a location or an item to be dry cleaned. The information is manipulated in some manner so that it becomes useful and a report can then be generated. Generally speaking, that is also what the Applicant does in this application. However, the Board does not believe that it would be obvious to take this general concept, which has been used in other fields of technology, and adapt it to the Applicant's specific use. Each of the references is directed to a particular application and there is no teaching of the general idea being used in any other area. The Examiner has provided no evidence that prior to the instant application, there was any type of system in use to maintain and service all of the light fixtures in a large facility.

It goes without saying that light bulbs burn out and must be replaced. During the hearing, it was stated that the system and method claimed in this application merely reflect the way in which it is assumed that repair and maintenance of lighting have always been done. In reply to this statement, Ms Wilson commented that if this were the case, the Examiner would have provided prior art showing that this system is known and that in the absence of prior art, the application should be allowed.

The Applicant has submitted affidavits from Carl Faucher, Property Engineering Manager; Robert Saggo, President of Shining Lights Inc.; and Grant Cully, Maintenance Manager. While affidavits of the type submitted are always in support of an applicant, it is interesting to note that each of the three individuals appears to have an impressive amount of experience in the field of lighting maintenance. In the affidavits, each affiant indicates that prior to being introduced to the system of the instant application, lighting maintenance had been performed on an *ad hoc* basis, that is when someone noticed that a light bulb had burnt out, a member of the maintenance staff was dispatched to replace it. None of the affiants was aware of a system which combined an orderly inspection for fixtures in need of repair with a database which allowed for the tracking of repairs over time.

The Examiner had the following to say about indefiniteness:

According to the description both the location and type of the light fixtures are identified by the observer.
The computer may be programmed to establish a repair route for fixtures as being in need of repair, based on the location of the light fixtures and types of problems **identified by the observer** (page 2 [3], lines 27 to 29).

Thus, the type of problem and the fixture location must be entered with a keypad separately from the scanning of the bar code. The description lists information, stored in the database and related to each fixture through the bar code indicia such as the date of installation and fixture type (page 6, line 30, to page 7 line 6). It is also stated that the information is not limited to the itemized list – but the fixture location is not included in the database because it is only identified by the observer at the time of the problem identification.

Claim 1 defines the generation of a report comprising a repair task route. Although the claim defines a portable reader for entering the fixture indicia, the claim fails to define the entry of the fixture location. Furthermore, the disclosure does not describe how a route is to be mapped given the location of individual fixtures. The remaining claims fail to overcome the indefiniteness. Claims 1 to 19 are not supported by the disclosure and are indefinite and therefore do not comply with section 27(4) of the Act.

Claim 1 is further incomplete for failing to claim all of the elements which are required to prepare the repair route report. The claim defines labels, a reader and a database but fails to define the required elements for obtaining the desired report. The desired result of obtaining a repair route report does not follow from the preceding structure in the claim. Since the remaining claims do not overcome the objection, claims 1 to 19 are indefinite.

The Applicant said the following about the indefinitness rejection:

The Supreme Court of Canada in *Free World Trust v. Electro Santé* has stated that the specification must be read from the point of view of a mind willing to understand, and that the claims be construed fairly and purposively. The Applicant respectfully submits the indefiniteness objections raised by the Examiner suggest an overly critical analysis which does not credit the inventor for what he has truly invented and the plain meaning of the language used to describe and claim the invention

1. The Examiner has artificially parsed the statement at page 2, lines 27 to 29 of the disclosure to conclude that the description does not call for the observer to identify both the location and type of problem of the light fixture. The Applicant submits that a person skilled in the relevant art, as the addressee of this patent application, would understand on a fair and purposive reading of the disclosure that the fixture location is present in the database before a report is generated, and that *how* the fixture location gets into the database is not relevant of the invention.

.....

2. The Examiner has objected to the claims on the basis that they fail to claim all of the elements required to prepare a repair task route. As this objection is predicated on the conclusion that the observer must identify the location of the light fixture, discussed above, the Applicant submits that claims 1 through 19 are not incomplete and are fully supported by the disclosure.

3. The Examiner states that the present application has no description of how one would arrive at a repair task route. This is stated clearly and explicitly in the description at page 7, line 17 to line 24, which states that the fixtures in need of repair are sorted by group, each group corresponding to a specific location in the structure or surrounding premises. An example is clearly illustrated in Figure 3, under the column “Floor Number,” from which it can be seen that the sequence of repair tasks set out in the activity report of Figure 3 are arranged by floor number in decreasing order. Any person of ordinary skill in the art would clearly understand from this how to generate the repair task route cited in the claims.

The Board has studied the disclosure and claims of the instant application and finds that the claims are not difficult to understand. The Examiner has stated that the fixture location is not stored in the database and must be entered by the observer when the defective fixture’s bar code is read. Because this essential feature is not set out in claim 1, the Examiner believes that the claim is indefinite. In support of this statement, the Examiner has quoted page 3 lines 27 to 29 of the disclosure. The Board has read the same passage and believes that the phrase “identified by the observer” describes the “types of problems” only, and is not related to the “locations of the light fixtures”. The Board’s interpretation of this passage is supported because the disclosure also states that the inclusion of a keypad on the scanner is only an option (page 3, lines 18 and 19). Therefore, the location of each fixture must be included in the database.

The Board has concluded that the claims are not indefinite and that they include all of the essential elements of the system.

As for the generation of a repair task route, this seems to be a matter of choosing from a number of options, once the locations of the fixtures to be repaired are known. For example, the fixtures could be listed in order, from the top floor of the building to the bottom, or from the bottom to the top. As the Board understands it, the repair route is simply a listing of the fixtures in some chosen order.

Finally, the Examiner rejected the application for failing to satisfy the requirements of Section 2 of the Patent Act. In doing so he stated:

Inspection and repair of light fixtures are known procedures. The manual method of repairing fixtures requires two trips: first the inspector who circles the fixture to be serviced on the plant floor plan, and second the maintenance person who repairs the fixture following the marked-up floor plan as the repair task route. A computerized system requires also two trips: first by the inspector to scan the light fixture and to enter the location, and then by the maintenance personnel to make the repair. Thus, the computerized system described has no saving in personnel required to preform the tasks.

What applicant has described is that by using a computer, instead of a maunal system of pen and paper, records can be updated automatically. The manual method of marking a floor plan is clearly not patentable since the maintenance method has been preformed since the invention of the light bulb. The mere fact that a computer is or should be used to implement discovery does not change the nature of that discovery since otherwise the invention of the computer would then have the unexpected result of transforming into patentable subject matter what under the Patent Act as enacted was clearly not patentable. *Schlumberger Canada Ltd. v. Commissioner* (1982), 56 C.P.R. (2d) 204-206. Claims 1 to 21 as well as the remainder of the application therefore do not satisy the requirement of invention under section 2 of the Act.

That a computer can print relations between data is not a new use of the computer but rather a function of the cross-referenced files stored on the database. Databases are described in the applied references in conjunction with the use of bar code scanners having both mobile and immobile inventory. The application of bar codes to light fixtures is not an innovative method of applying skill or knowledge within the meaning of the words in *Shell Oil*. Applicant's method of preparing a repair task route is not an art or process as found on the definition of invention at section 2 of the Act.

In its reply of June 11, 2003, the applicant stated, in part:

The Applicant submits that the Examiner has mischaracterized the inventive aspect of the present invention. Although the description acknowledges that a computer may be used to enhance the efficiency of the invention, and a "microprocessor appliance " is included as an element in the claims, it does not follow that the mere use of a computer in the Applicant's light fixture management system is the inventive aspect of the present invention.

One of the inventive aspects of the Applicant's invention is the association of labels marked with unique indicia with immovable light fixtures such that the repair task route may be generated, *either manually or by computer*, (page 8, lines 7-11) based on the spatial relationship of the fixtures. This is not a mere workshop improvement due to computerization of a prior art light fixture management system. The examiner has not shown where a repair route - manual or otherwise - is taught by the art. The fact that a computer is available to manage a database containing information relating to the fixtures does not inevitably lead to the concept of applying labels bearing indicia on light fixtures in order to generate a repair task route based on the spatial relations of the fixtures, or to track their repair requirements or history. Accordingly, the Applicant submits that the light fixture management system, as described and claimed, qualifies as an "invention" under section 2 of the *Patent Act*.

With respect to the Examiner's other comments under the heading "Section 2" of his Report, the Applicant submits the following:

1. The Examiner continues to object to the subject matter of the application on the basis that the present invention merely describes the computerization of a manual method of light fixture repair. As noted previously, the Applicant submits that this objection is completely without foundation, as the Examiner has not cited any prior art by which a similar process is followed manually.

Section 2 of the Patent Act gives the following definition of the word invention:

"invention" means any new and useful art, process, machine, manufacture or composition of matter, or any new and useful improvement in any art, process, machine, manufacture or composition of matter.

The Examiner has taken the position that the subject matter of the instant application does not fall under the definition of invention contained in Section 2 because the Applicant has merely taken an old, well known system which used to be implemented manually, and has automated it. The Examiner has stated that the manual system is "clearly not patentable". What is not clear from this statement is if the Examiner considers the manual system not to be patentable because it is old and well known or because it is not the type of subject matter that falls under the definition of invention in Section 2. However, the Examiner mentions the Schlumberger decision in support of his position.

In Scmlumberger Canada Ltd. v Commissioner of Patents, 56 C.P.R. (2d) 204, Pratte J. had the following to say about the use of a computer to do calculations:

In order to determine whether the application discloses a patentable invention, it is first necessary to determine what, according to the application, has been discovered. Now, it is obvious, I think, that there is nothing new in using computers to make calculations of the kind that are prescribed by the specifications. It is precisely in order to make that kind of calculation that computers were invented. What is new here is the discovery of the various calculations to be made and of the mathematical formulae to be used in making those calculations. If those calculations were not to be effected by computers but by men, the subject-matter of the application would clearly be mathematical formulae and a series of purely mental operations; as such, in my view, it would not be patentable. A mathematical formula must be assimilated to a "mere

scientific principle or abstract theorem" for which s-s. 28(3) of the Act prescribes that "no patent shall issue". As to mental operations and processes, it is clear, in my view, that they are not the kind of processes that are referred to in the definition of invention in s. 2. However, in the present case, the specifications prescribe that the calculations be made by computers. As a result, as I understand the appellant's contention, those calculations are not mental operations but purely mechanical ones that constitute the various steps in the process disclosed by the invention. If the appellant's contention were correct, it would follow that the mere fact that the use of computers is prescribed to perform the calculations prescribed in the specifications, would have the effect of transforming into patentable subject-matter what would, otherwise, be clearly not patentable. The invention of the computer would then have the unexpected result of giving a new dimension to the Patent Act by rendering patentable what, under the Act as enacted, was clearly not patentable. This, in my view, is unacceptable. I am of opinion that the fact that a computer is or should be used to implement discovery does not change the nature of that discovery. What the appellant claims as an invention here is merely the discovery that by making certain calculations according to certain formulae, useful information could be extracted from certain measurements. This is not, in my view, an invention within the meaning of s. 2.

In the Schlumberger case, the Court found that it was necessary to analyse the claims to determine exactly what had been invented. The Schumberger application claimed a "machine operated method" and was directed to a system in which data were supplied to a general purpose computer which used a novel algorithm to perform calculations and produced intellectual information. If those calculation were to be performed by humans, the subject matter would not be patentable. Merely substituting a computer to do those calculations did not alter the fact that the subject matter would not be patentable. A method which consists solely of doing calculations, whether manually or by computer, is not patentable. In order to be directed to patentable subject matter, the computer related matter must be integrated into an area of technology which is traditionally patentable.

With respect to the instant application, the same analysis does not lead to the same conclusion. The system claimed in claim 1 is more than a computer doing calculations or making comparisons by using information contained in a database; it also includes labels containing indicia, a reader which can read the indicia on the labels and the preparation of a report which specifies the sequence of fixture maintenance. The first part of the claimed system involves collecting information using indicia contained on labels by using a label reader. This information is then placed in a computer and is combined with other information which is contained in a database stored in the computer. The result of this combination is not merely intellectual information, it is a specific set of instructions for a path to be followed while repairing light fixtures.

As a result, the Board has concluded that the subject matter which is disclosed and claimed in the instant application is patentable subject matter. As stated previously, the Examiner has offered no evidence to support his contention that the method and system claimed in the instant application are well known and that the Applicant has merely substituted a computer for the manual system of pen and paper.

In summary, the Board has found that the system and method claimed are patentable subject matter, that they were not obvious to a person skilled in this field of technology on the claim date and that the claims are clear and concise.

The Board therefore recommends that the Examiner's rejection of the application be reversed and that the application be returned to the Examiner for further prosecution.

Michael Gillen	John Cavar	M. Wilson
Chairman	Member	Member

I concur with the recommendation of the Board that the Examiner's rejection of the application be reversed and that the application be returned to the Examiner for further prosecution consistent with the Board's recommendation.

David Tobin

Commissioner of Patents

Dated at Gatineau, Quebec

this 2nd day of February, 2006