Commissioner=s Decision # 1287

Décision du Commissaire # 1287

TOPICS: A11, B00, C00, F01

SUJETS: A11, B00, C00, F01

Application No: 2,207,986

Demande no: 2,207,986

COMMISSIONER'S DECISION SUMMARY

C.D. 1287 Application No. 2,207,986

The application relates to protective eye gear to protect users from the harmful radiation effects

of computer monitors. In the Final Action, the Examiner objected to the inclusion of new matter in the description, claims and drawings. The claims were rejected by the Examiner on the grounds of lack of novelty, and for merely defining the invention in terms of a desired result. The specification was rejected for failure to correctly and fully describe the invention. The Board agreed with the examiner on the grounds set out in the Final Action.

The Commissioner agreed with the Board=s recommendations and the application was refused.

IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application number 2,207,986 having been rejected under Subsection 30(4) of the *Patent Rules*, the Applicant asked that the Final Action of the Examiner be reviewed. The rejection has been considered by the Patent Appeal Board and by the Commissioner of Patents. The findings of the Board and the decision of the Commissioner are as follows:

Applicant

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I. INTRODUCTION

[1] This decision deals with a request that the Commissioner of Patents review the Examiner=s Final Action on patent application no. 2,207,986 entitled AEye Video Display Terminal Protective Gear@. The Applicant, who is also the inventor, is Mr. Martin Reesink.

[2] The invention relates to protective eyeglasses to be worn by computer users to prevent glare and the harmful effects of radiation emissions from computer monitors on the user=s eyes.

II. BACKGROUND

(a) Prosecution history

[3] The present application was filed on June 27, 1997, and completed on September 9, 1997. After a protracted examination, the Examiner in charge of the application issued a Final Action on November 3, 2005. The particular grounds for rejecting the application were:

(i) the application as amended did not comply with Subsections 38.2(2) and (3) of the *Patent Act*, as the amendments added matter not reasonably to be inferred from the specification or drawings as originally filed;

(ii) the specification did not comply with Subsection 27(3) of the *Patent Act*, for

failure to correctly and fully describe the invention;

(iii) the claims did not comply with Subsection 27(4) of the *Patent Act*, for merely defining the alleged invention in terms of a desired result rather than the procedural steps or structural elements required to achieve that result; and

(iv) the claimed invention did not comply with Section 28.2 of the *Patent Act* as it lacked novelty on the claim date.

[4] All of the grounds relied upon in the Final Action had been raised in previous examiner=s reports. While not all the objections were raised in each and every report, it appears that this was due to the Examiner=s focus on resolving the issue of new matter, not because the Applicant=s arguments and amendments caused the Examiner to drop the other objections.

[5] On May 3, 2006, the Applicant replied to the Final Action. The Applicant did not amend the application, but presented arguments in favour of the claims and description pages submitted prior to the Final Action.

[6] In the Examiner's view, the Applicant's reply did not overcome all of the objections raised in the Final Action. On September 27, 2006 the application file was forwarded by the Examiner to the Patent Appeal Board for review.

[7] In accordance with Subsection 30(6) of the *Patent Rules*, the Applicant requested an oral hearing before the Patent Appeal Board and a review by the Commissioner of Patents. The oral hearing, conducted by teleconference, was held on May 16, 2007. Mr. Reesink

was self-represented. Representing the Patent Office were Louis-Pierre Riel, who was a Senior Patent Examiner at the time he wrote the Final Action, and Claude Plante, the Examiner who wrote several of the previous Office Actions concerning this application.

(b) The issues

[8] Having regard to the claims and description on file, the Board must review the record before us and determine:

(1) whether the application as amended complies with Subsections 38.2(2) and (3) of the *Patent Act*, which prescribes the type of amendments that may be made to the specification and drawings of an application subsequent to its filing date.

[9] Then, based on the conclusions reached with respect to the above issue, the Board must further determine:

(2) whether the specification correctly and fully describes the invention;

(3) whether the claims are defective as merely defining a desired result; and

(4) whether the invention as claimed was novel on the claim date.

III. DOES THE APPLICATION COMPLY WITH SS. 38.2 OF THE PATENT ACT?

(a) The position of the Examiner

[10] In the Final Action the Examiner stated, with respect to the issue of new matter:

During the prosecution, amendments are possible in order to modify some claims to overcome prior art documents and/or examiner=s objections, or to modify the specification and/or drawings to clarify ambiguity or other elements not conforming to the *Patent Act* and *Rules* in the specification. No amendments can add new matter.

Regarding amendment to the specification, subsection 38.2(2) of the *Patent Act* states:

The specification may not be amended to describe matter not reasonably to be inferred from the specification or drawings as originally filed, except in so far as it is admitted in the specification that the matter is prior art with respect to the application.

Reasonably inferred means that the amended text can be found in the original patent application, in term that it is a paraphrase or very closely implied in the original text. To come up with the solution later after just having exposed a mere concept or desired result, does not qualify as matter reasonably inferred from the original patent application.

The patent application as filed describes eyeglasses, or kind of eyeglasses clip on, to be worn by the user as a protection against CRT monitor radiation. These are the only details given in the description. No claims or drawings are present. These details are only desired result, as no real solution is given on how this protection is achieved. This absence of structural details or procedural steps was addressed in the first examiner=s report, as a non-compliance with subsections 27(3) and 27(4) of the *Patent Act*. This non-conformity is still present and the examiner reinstates that the last valid specification only defines desired results, rather than procedural steps or structural elements necessary, which when carried out, will achieve that result.

In response to the first report, the applicant added the detail of a thin layer of lead. This detail was not present in the patent application as filed, nor is it possible to reasonably inferred this detail from the patent application as filed. Not only this is new matter, which cannot be inserted in the patent application, but it is also anticipated by the Rademacher document. The applicant responded to this

report by adding other details and embodiments which were not present in the patent application as filed, especially since there was no manufacturing process in the original patent application. This addition of new matter was addressed in the examiner=s report of December 22, 1999.

Since this report, the applicant has been warned several times that matter added through amendments was new matter. These amendments are on file, but cannot be considered as being formally part of the patent application as they are new matter and because some of the instructions on how to enter the amendment are rather confusing.

As such, only what is present in the patent application as filed could be considered for examination. The rest could be filed in a new patent application, but any matter introduced in the patent application has to be filed not less than 12 months after its introduction, otherwise, this matter becomes citable prior art against the new filing. Applicant was warned about this situation early in 1998 by a lengthy telephonic conversation with the current examiner.

To recapitulate, elements that are not present or that cannot be inferred from the patent application as filed are:

X The microthin layer or film of lead (Pb)

X The process of manufacturing the microthin layer

X The viewing helmet, as the word Aprotective gear worn by the user@ is too far fetch to provide a support for a so specific element. It is not sufficient to merely refer to an hypothetic Agear@ and then come back later with a more precise solution with structural element and use the first as a support

X The wearable cowl for the same reasons

X The retractable system described and shown in the drawings filed February 16, 2002.

Regarding drawings, subsection 38.2(3) of the *Patent Act* states: *Drawings may not be amended to add matter not reasonably to be inferred from the specification or drawings as originally filed, except in so far as it is admitted in the specification that the matter is prior art with respect to the application.* Nothing in the original patent application can lead to the

details and solution illustrated in these drawings.

(b) The position of the Applicant

[11] In a response to the Final Action, received May 3, 2006, the Applicant replied to the rejection of the newly added matter as follows:

> Ref. Examiner=s claim that figures contained new matter, not acceptable under 38.2 Patent Act, Anew matter to be removed:@ the applicant respectfully refers the Examiner to subsection (2) of that of s. 38.2, namely that the Aspecification may not be amended to describe matter not reasonably to be inferred from the specification ... as originally filed ...@ and directs the Examiner to incorporate the drawings submitted as part of the examination. The reasons for this are as follows: (a) the drawings may reasonably be inferred from the specification provided in 1997, specifically, the words Athe protective screen is carried by the user, NOT the computer.@ The drawings show just such a protective screen. A reasonably informed person reading the words in 1997, and again in 2005 would rightly and properly infer the drawings to be included in the words. (b) Examiner simply restates his position that the drawings provided could not be reasonably inferred from the original specification, but provides no reasons, other than (i) no drawings or figures which originally filed; (ii) when they were submitted they were submitted late into the prosecution; (iii) examiner restated his view that original application was stated a general idea and was missing any mechanical detail. In response to these three sub-points (i, ii, and iii) the applicant respectfully submits; the Patent Act does not require drawings or figures to be submitted; the Patent Act does not provide a timeline within which the drawings or figures may be submitted, and finally the original submission of the applicant in 1997 provided ample mechanical detail on which to hang the drawings and figures subsequently filed, namely the words Aglasses@ the word Ascreen@. Applicant respectfully submits that the Examiner has not shifted critical positions from his letter of 22 December 1999, where he wrote that the
>
> Patent Act does not allow the granting of a patent for an invention which was just conceived in a sketchy form at the time of filing; on the contrary, the invention must have been described

in full details and in a fully operational way at the time of filing. Otherwise, anyone could lay claim to an invention, and develop it while the patent prosecution takes place, in effect excluding other inventors from developing solutions, instead of rewarding inventors for having developed workable solutions.

In reality, Applicant has since 1997 submitted several amendments, as envisaged by the Act. These amendments were possible, and indeed have been considered by the Examiner precisely because they flowed naturally and reasonably from the original 1997 application. Were the Examiner=s interpretation of the Act to be applied and accepted, then applications would have to be fully completed before a patent was ever granted. Indeed, reading the word Afully@ as applied to Aoperational@ leaves no room for amendments in the Examiner=s interpretation of the Act. This interpretation is far too narrow, and if it is not too narrow, then it is exclusionary, biased against this Applicant, and unfair. Applicant submits respectfully therefore that the Examiner=s interpretation of the Act is wrong in law, because it excludes the application on too restricted a definition of what may be submitted or what may serve as a filing where applicants may file amendments. Finally, the Afloodgates@ argument proposed by the Examiner whereby the Examiner warns that Aanyone@ could lay claim to an invention is false in fact: not Aanyone@ has filed for an invention as described in the present application. In fact, very few individuals B three in North America as counted by the Applicant B have even considered related issues and their technical solutions, as evidenced by the limited prior art in this area of work.

[12] The Applicant further added a number of additional arguments, reproduced as follows:

1. that no significant progress has been made stems only from the refusal of the examiner to bring about the amendments proposed by the applicant.

2. the inventive concept of protecting consumer=s eyes with a protective shield, including a helmet or Acagoule@ has always been present in the invention, which is broader than the 1992 Rademacher, itself a series of claims of bi-layers only;

3. this much broader scope of the present invention goes beyond the Rademacher claims, and contained all the necessary information; subsequent amendments filed B had they been applied to the file by the examiner as requested B would have yielded a final patent application;

4. no new matter could have be[e]n added since the original invention application was broad enough to support the subsequent amendments. This is why they are called amendments; the wording of Anew matter@ is subjective in the eyes of the examiner; in fact no case law or patent interpretation rules or regulations were listed or given in support of this Anew matter@ argument by the examiner;

5. the layer of lead was to read in from the original patent application in 1997 which specified that glasses or Screenies was being applied for B that these glasses or screens be made of lead or other material is not a new concept; the glasses or Screenies could have been made of any material subsequently amended, but not new; this should have ben reasonably inferred;

6. to label an amendment Anew matter@ does not, by this definition alone make the amendment new matter;

7. the gear because it was broadly stated is not Ahypothetical@ as examiner claimed on page 4 of his letter;

8. all the drawings that were submitted can be reasonably and logically inferred from the initial application in 1997; if this were not the case how could drawings ever have be[e]n applied to the initial description and been considered as a possible amendment in the first place; the fact that they were considered defies the logic that they could not be inferred; if they were considered they must have been reasonable;

[13] At this point the Board would like to make a few comments concerning the entering of

amendments, and how amendments are considered by examiners, in order to address the issues raised by the Applicant in points 1, 3 and 8, above.

[14] Patent Office procedures provide that amendments submitted by an applicant in respect of an application are placed on the file. An examiner has no discretion to not place such amendments on file. Where an examiner determines that submitted pages involving the description, claims, or drawings do not comply with the *Patent Act*, the Applicant is notified in an Office Action. An examiner cannot remove the pages containing the objectionable material, however. New pages of description, claims or drawings can only be supplied by the Applicant. When such pages are submitted by an Applicant, either in response to an examiner=s objection or voluntarily, these replacement pages are automatically placed on the file. As a result, it cannot be presumed that matter is not objectionable merely because certain pages were placed on file. This practice is set out in MOPOP 19.02.02, which reads:

> 19.02.02
>
> Entry of new pages into the application file
>
> Generally, when an amendment is received in the Patent Office, it is entered into the application file before an examiner determines its acceptability. New pages submitted by the applicant are substituted in place of the pages altered by the amendment and the covering letter with the supporting explanation for the amendment is attached to the file.
>
> It should be noted that the entry of new pages into the application file does not denote acceptance of the amendment by the examiner.

(c) New subject matter: Legal principles

[15] Subsections 38.2(2) and (3) of the *Patent Act*, which prescribes the type of amendments that may be made to an application subsequent to its filing date, read as follows:

> 38.2 (2) The specification may not be amended to describe matter not reasonably to be inferred from the specification or drawings as originally filed, except in so far as it is admitted in the specification that the matter is prior art with respect to the application.
>
> (3) Drawings may not be amended to add matter not reasonably to be inferred from the specification or drawings as originally filed, except in so far as it is admitted in the specification that the matter is prior art with respect to the application.

[16] The reason underlying the restriction against new matter is that the filing date of an application is a critical date insofar as it is the relevant date for utility of a claimed invention, as well as the requirements of novelty and non-obviousness (excluding situations where there is a claim for priority based upon an earlier filed application, as there is no such claim in the present instance). And since the specification must be objectively assessed for compliance with the patentability requirements as of the filing date of the application, it would be unfair to the public to permit amendments to an application after this date which add matter not suggested by the specification and drawings as they appeared on the filing date. To allow such a practice would inevitably lead to the result in some cases of a claimed invention that, based on an objective assessment of the specification on the filing date, lacked novelty, being considered as novel in view of subsequently added subject matter.

[17] As stated by Maclean P. in *De Forest Phonofilm of Canada Ltd. v. Famous Players*

Canadian Corp., [1931] Ex. C.R. 27, at para. 19 [emphasis added]:

> It is to be assumed that De Forest knew as much about his invention in 1920, when it is claimed it was first described in a specification, as he did at the date of the trial of this action; any new methods of using his small arc lamp, or any new and useful ends to which it might be applied, since discovered or invented, cannot be relied upon to support the invention with which he entered the Patent Office in 1920; he must leave the Patent Office with nothing more than the invention which he brought there, and as described in his specification.

(d) Analysis

[18] Subsections 38.2(2) and (3) of the *Patent Act* poses the following questions: Under what conditions should the reasonable inference be made and by who shall it be made? The answer to the questions are: The person skilled in the art at the time the application was filed (*Re Application No. 315,073* (1981), Commissioner=s Decision No. 904; *Re Application No. 245,193* (1982), Commissioner=s Decision No. 938).

[19] It is clear to the Board that the inference must be made based on the originally-filed specification, and not on other information related to the invention that may have been in the head of the inventor on the filing date but was not disclosed in the original application. Such an assessment cannot be made because it would not be possible for the theoretical person skilled in the art, on the filing date, to know what was in the mind of an inventor with respect to his invention beyond that which the inventor disclosed in the specification. It may well have been that the Applicant had made a useful invention as of the filing date. To receive patent protection, however, an applicant must show by the application as filed that the subject matter of the application relates to a patentable

invention, reduced to a definite and practical shape, and not merely to a concept or idea.

[20] In order to decide if the present specification, comprising the description and claims, contains new subject matter, it is necessary to study the originally filed specification to determine what material was originally present, and then to compare this with the specification currently on file.

i. The original specification

[21] On the filing date, the application contained only a description, which read, in part, as follows [emphasis by Applicant]:

> This letter is an application for patent protection for my invention ASCreenies@ - protective glasses to be worn by computer users to ward off glare and radiation.
>
> It is known that television and computer screens emit very low frequency and extremely low frequency (VLF and ELF) radiation which causes harm to peoples health and eyesight. Precisely what harm and to what effect remains to be proven decisively but preliminary research and academic journal articles, the list of which is too long to introduce here, prove that some ill effects do occur. Some of these articles are: PREVENTION, March 1994, 46:3, p. 115 article by M. Spliner; PREVENTION, June 1996, 48:6, p. 32 by Marty Munson; THE JOURNAL OF SAFETY RESEARCH, summer 1994, 25:2 Wallin J.A. et al., and many other articles I have for your perusal. These articles debate the extent and the hazard, but none denies that harmful radiation is emited by computer monitors. There is no reason why the consumer should wait around for researchers to confirm the extent of the risk to eyesight and health.
>
> In fact, large corporations like 3M in Minnesota already do produce protective screens that computer

owners can set up in front of their monitors to protect against VLF and ELF. The problems with these screens are five at least:

1) they do not always fit the monitor properly;

2) they are expensive, and with the bottom line mentality of large corporations (in the public and private sectors) these are rarely installed at multi-user work stations. ...

3) Most computer manufacturers now also claim that their monitors emit low frequency radiation. But that nevertheless means radiation does come out of the monitors. What renders this hazard more dangerous is that

a) people who use computers sit much closer to them than they would to television screens, as computers are not remote-controllable.

b) second, people sit in front of their computer for much longer periods of time because this is their work station.

4) the screens are not easily moveable from one monitor to another, that is to say from one (older) computer with high emissions, to another with low; or from work to home.

5) Most computers still lack built-in protection and there is little incentive for computer wholesalers, retailers, or users to install them.

6) People in the next few years will use their computers more than any other utility in their home as cable TV, the Internet, computer functions and telephone will eventually be combined into one unit. The importance and scope of eyesight protection vis-à-vis ELF and VLF radiation will grow as screen use and proximity increases.

The best protection is that which can be applied by the ultimate consumer him- or herself. No one else will be as (ir)-responsible as the consumer. As a daily computer user myself, where Auser@ means I spend at least 5 hours per day in front of a sreen, I have come to appreciate how my eyes are affected by this radiation. (Yet I do not own a television, and am not affected by that radiation.)

For these reasons, in mid-November 1996, as I was looking for a summer job in 1997 with a law firm, I noticed that several law firms offered sight insurance to their employees. I t[h]ought there must be a good reason for this. That prompted me to think that no one had thought up of manufacturing glasses with the protective element in the frame to protect from the monitor radiation.

The glasses could be worn at all times, and for people like myself who work at more than one computer in the course of the day, the glasses could easily be worn to the other worksite. For people who already wear glasses, the screen could be attached to the top of their existing frames much as do some sun glasses. More work could be done to learn whether or not the blocking element could also be incorporated into contact lenses.

The new ingenuity element of this invention is that the protective gear is worn by the user where or when it is deemed necessary. The condition of protection, in other words, is not hardware or machine-dependent: this is the fundamental paradigm shift that makes my protection mechanism so important, new and key to consumer eye protection.

I have a lot of research already performed on this issue namely:

1) which US companies manufacture the protective screens and at what cost to the consumer;

2) detailed, researched information and academic journal articles on the physiological effects of the EDF and VLF radiation: some 10 million users already suffer from radiation-related complications in the U.S. alone.

3) interviews with opthamologists.

In total I would estimate that that I have performed 40-50 hours of work and research on the development of this project.

The purpose of this letter is to register these glasses as a patent which I have also named SCREENIES. In a further, separate procedure, I would like to register a trademark with ASCREENIES@ as the marketing name. It is my purpose to patent this protection gear, and keep the licence for as long as I can and to start my own business marketing these protective glasses, which I am convinced do not exist and that I am the first person to think of this protective mechanism.

Of course, further work is required to decide how to incorporate the element into the glasses. I will meet further with opthamologists and optometrists shortly to see how this can be done. But the

purpose so far is to declare my intent and state that I have, for all intents and purposes invented this new system for the protection of computer user=s eyesight. I believe this is an invention which is as important in scope as the seatbelt: it is simple, effective, easy to use and very necessary in order to protect people from radiation about which too little is known.

...

The glasses are an improvement on the computer protective screens, but the NEW factor that I have invented is that the protective screen is carried by the user, NOT by the computer. This is the element of Awhy-did-I-not-think-of-that@ that is mentioned in your Patent Guide.

[22] In summary, the original description discloses the idea of providing a device to protect computer users from glare and VLF and ELF radiation from computer monitors, such device to be in the form of glasses or in the form of a clip-on attachment for glasses, with a protective element, to be worn by the user rather than attached to the computer monitor, but it contains no specific, technical details of the device. No information is provided in the description regarding the structure or composition of the protective element to be used and, as noted in the final paragraph of the above excerpt from the original description, Afurther work is required to decide how to incorporate the element into the glasses.@

[23] The application on the filing date contained neither claims nor drawings.

ii. The specification currently on file

[24] The specification currently on file contains a description, submitted on February 25, 2005, which is reproduced below:

DETAILED DESCRIPTION OF INVENTION

EYE VIDEO DISPLAY TERMINAL PROTECTIVE GEAR

FIELD OF THE INVENTION

This invention relates to the health industry, specifically it is an eye and head protection device for protecting computer terminal users from video display terminal-generated radio-frequencies.

Background art that, as far as is known to the applicant, may be regarded as important for understanding, searching and examination of the invention is that Rademacher, US # 5,140,710 and Chika et al. US # 5,202,566, as well as # 6,003,990 Dec 1999 Einhorn 351/45 and #6,062,691, May 2000, Markson 351/203.

In general, the invention provides for the protection of radiation that is emitted through video display terminals (VDT). To understand the technical problem, the reader need only consider its purposes in two facets. First, that VDTs are more and more frequent in the workplace, with users spending up to seven hours less than a meter away from the VDT which generates the radiation. Second, the VDTs generate different forms of radiation, depending on the VDT. The constant, therefore in this technical problem is the user, whose eyes and head are at risk. The solution envisaged by this invention is that the user generates the protection, and carry it with him or her to be applied as against facets one and two of the technical problem. That is to say, regardless of how frequent and how different VDT usage becomes, the constant user will systematically apply the protection that is this invention.

The eye protection equipment envisaged is displayed in the drawings in one of its optimal, but not only formations, in this invention to protect the eyes and a portion of the forehead from radiation emanating from video display terminals (VDT). Figure 3 shows the eye protection equipment and shield 9 in the frontal position. Figure 1 shows the said equipment and shield in the lateral, uplifted position. Figure 2 shows a lateral view of the equipment and said shield, in a partially lifted position. In particular, the ridge and framework *7* shows how the shield may be moved vertically and

horizontally at 7 to permit the user to work temporarily without the shield in place. The elasticized head frame and cowl 8 is visible in figure 2, accommodating video display terminals users who may be more active in their viewing as may happen, for example in video games, bank telling machines, iris identification medium and others. The shield 9 is itself visible in full frontal view in Figure 3, including the light-weight material that permits the user to maintain a barrier between him or herself and the VDT and the user=s eyes, or, where the user is already using eyewear, between the said eye wear and the VDT screen. The top portion of the shield reveals a space at the top, exemplifying the coincidental protective aspect of the shield=s protection of the forehead, which may also be adjusted by pivoting the framework 7 shown in figure 2.

One mode contemplated by the inventor for carrying out the invention is herein described as applying a thin layer of a metal such as lead or gold to the screen and/or the glasses to be worn by the VDT user. An alternative mode is to use a light-weight cowl or hood with glasses or screen attached to it with a similar layer of micro-thin metal applied on the screen or glasses. For example, when welders apply their trade, they use a mask or screen which can be lifted when not welding. This is mode one. The alternative mode can be exemplified by the hood worn by certain sportsmen, where the screen or glasses are incorporated directly into the head-gear, such as some hockey player=s or soldier=s helmets or skier=s goggles.

[25] The description is followed by a set of claims, also submitted on February 25, 2005, reproduced below:

What is claimed is:

1. Eye protection gear for blocking and preventing radiation from damaging the eyes of users, the equipment entailing:

a shield of micro-thin metal, ultra-light weight protective material, positioned in between the user=s face and the video display terminals, and, if the user wears prescription glasses, between the user=s

glasses and the video display terminals, covering the top half of the user=s face, from the forehead at the top to the middle of the cheeks, in order to cover the eyes,

a dual system of ridges enabling the shield to rotate horizontally and vertically on the ridges to accommodate varying work environments and positions, and

a circular, elastic, contracting, removable fiber or textile holder to affix and maintain the shield and its ridge frames around and on top of the head of the user.

2. The eye protection gear of claim 1, wherein a lens, retractable and adjustable to fit the existing ridge system in claim 1 frames, between 0.5 and 0.25 centimeters in thickness, is attached to the protective gear according to claim 1, allowing for quick, easy and light-weight installation or insertion of the protective screen according to claim 1.

3. The eye protection equipment of claim 1, wherein the lens described in claim 2 entails a microscopically-perforated, elastic, aerated textile lens, which, when worn by the user according to claim 1, extends from the crown of the forehead down to the bridge of the nose to cover the eyes, and, coincidentally, a portion of the forehead..

4. The eye protection equipment of claim 1, wherein micro-thin, adhesive lenses, sized to match the entire surface of the shield in claim 1 can be fixed to adhere to the shield in single or successive layers in order to further shield the eyes from varying degrees of radiation, and to accommodate varying degrees of sensibilities of the user=s eyes.

5. The eye protection equipment of claim 1, wherein the ridges are on a hinge system, accommodating the user=s need to raise the entire shield above the eye and the forehead without removing the elasticized head frame.

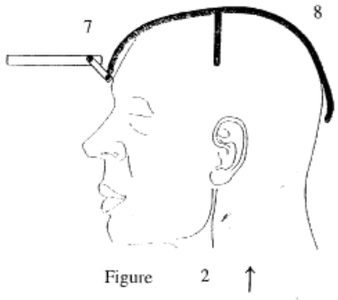
6. The eye protection equipment of claim 1, wherein the circular, elastic, contracting, removable fiber or textile holder to affix and maintain the shield and its ridge frames around and on top of the head

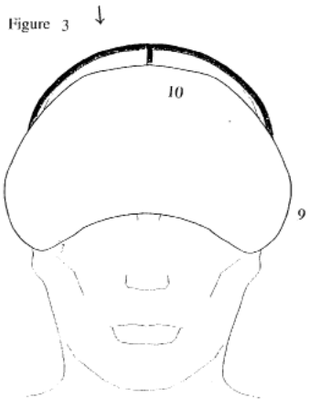
of the user is fully extended to cover the entire back of the head of the user, to ensure better, more snug fit where the video display terminal user activity demands more head movement..

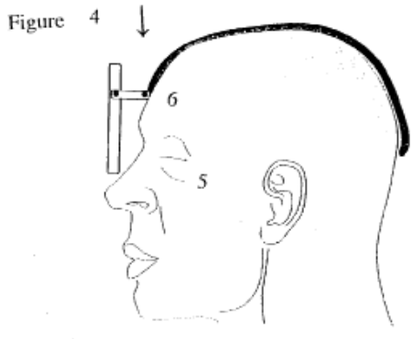
7. The eye protection equipment of claim 1 wherein, the said shield in claim 1 and the adhesive lenses in claim 4 consists of an ultra-thin layer of lead or gold, permitting the information to be viewed by the user but the radiation to be blocked before it impacts the user=s eyes and forehead.

iii. The drawings currently on file

[26] The claims are followed by a set of drawings, submitted on February 16, 2001, reproduced below:







[27] A comparison of the current specification and drawings to the description that was originally filed reveals the following new subject matter:

- the shield of microthin, lightweight metal;
- the elasticized head frame;
- the lightweight cowl or hood;
- the dual system of ridges on a hinge system for adjusting the position of the shield;
- the thin layer of lead or gold applied to the screen;
- the lens of between 0.5 and 0.25 centimeters in thickness;
- the microscopically-perforated, elastic, aerated textile lens;
- adhesive lenses fixed to the shield in single or successive layers.

[28] The Board considers that there is no suggestion or basis in the original description that any of these specific elements and details were considered as part of the invention, and therefore there is no justification for their later introduction into the application by way of amendment. As stated earlier, the original specification contained only the broad disclosure of providing a device to protect computer users from glare and VLF and ELF radiation from computer monitors, such device to be in the form of glasses or in the form of a clip-on attachment for glasses, with a protective element, to be worn by the user rather than attached to the computer monitor. It contained no teaching of any specific, technical details of the device, such as now appear in the specification and drawings. Therefore the Board finds that the above-noted new matter cannot be reasonably inferred from the originally filed specification.

[29] Subsections 38.2(2) and (3) also permit subject matter to be added to an application

when it is admitted in the specification that the new matter was prior art with respect to the application. However, neither the present specification and drawings nor any of the earlier versions contain such an admission. In any event, even if the specification did contain such a statement, it would not be of much assistance to the Applicant in the end result, as the statement would be an admission that all of the technical details of the invention, which are now relied upon by the Applicant to support his invention, were previously known in the area of protective equipment for radiation, and could not be used to distinguish the alleged invention from the prior art.

[30] In view of the above, the Board finds that the aforementioned new matter thus contravenes Subsections 38.2(2) and (3) of the *Patent Act* as it cannot be reasonably inferred from the originally filed specification. As a result, it cannot be considered as forming part of the Applicant=s alleged invention.

[31] In line with the above finding, the remaining issues will be addressed by considering the description, claims and drawings as though the above-mentioned objectionable new matter were not included.

IV. DOES THE SPECIFICATION CORRECTLY AND FULLY DESCRIBE THE INVENTION?

(a) The position of the Examiner

[32] In the Final Action the Examiner stated the following with respect to the requirements of the specification:

The patent application as filed describes eyeglasses, or kind of eyeglasses clip on, to be worn by the user as a protection against CRT monitor radiation. These are the only details given in the description. No claims or drawings are present. These details are only desired result, as no real solution is given on how this protection is achieved. This absence of structural details or procedural steps was addressed in the first examiner=s report, as a non-compliance with subsections 27(3) and 27(4) of the *Patent Act*. This non-conformity is still present and the examiner reinstates that the last valid specification only defines desired results, rather than procedural steps or structural elements necessary, which when carried out, will achieve that result.

(b) The position of the Applicant

[33] In the Applicant=s response to the Final Action, he did not directly respond to these ground for rejection.

(c) Specification requirements: Legal principles

[34] The requirements of the specification are set out in Subsection 27(3) of the *Patent Act*, which reads as follows:

27(3) The specification of an invention must

(a) correctly and fully describe the invention and its operation or use as contemplated by the inventor;

(b) set out clearly the various steps in a process, or the method of constructing, making, compounding or using a machine, manufacture or composition of matter, in such full, clear, concise and exact terms as to enable any person skilled in the art or science to which it pertains, or with which it is most closely connected, to make, construct, compound or use it;

(c) in the case of a machine, explain the principle of the machine and the best mode in which the

inventor has contemplated the application of that principle; and

(d) in the case of a process, explain the necessary sequence, if any, of the various steps, so as to distinguish the invention from other inventions.

[35] The equivalent requirements of Subsection 27(3) have been discussed by the courts on several occasions. In *Minerals Separation North American Corp. v. Noranda Mines Ltd.*, [1947] Ex. C.R. 306 at pp. 316-317, Thorson P. stated:

> Two things must be described in the disclosures of a specification, one being the invention, and the other the operation or use of the invention as contemplated by the inventor, and with respect to each the description must be correct and full. The purpose underlying this requirement is that when the period of monopoly has expired, the public will be able, having only the specification, to make the same successful use of the invention as the inventor could at the time of his application. The description must be correct; this means that it must be both clear and accurate. It must be free from avoidable obscurity or ambiguity and be as simple and distinct as the difficulty of description permits. It must not contain erroneous or misleading statements calculated to deceive or mislead the persons to whom the specification is addressed and render it difficult for them without trial and experiment to comprehend in what manner the invention is to be performed. It must not, for example, direct the use of alternative methods of putting it into effect if only one is practicable, even if persons skilled in the art would be likely to choose the practicable method. The description must also be full; this means that its ambit must be defined, for nothing that has not been described may be validly claimed. The description must also give all information that is necessary for successful operation or use of the invention, without leaving such result to the chance of successful experiment, and if warnings are required in order to avert failure such warnings must be given. Moreover, the inventor must act *uberrima fide* and give all information known to him that will enable the invention to be carried out to its best effect as contemplated by him.

[36] In *Consolboard Inc. MacMillan Bloedel (Sask.) Ltd.*, [1981] S.C.R. 504 at para. 27,

Dickson J., delivering the judgment of the Court, stated:

> Section 36(1) seeks an answer to the questions: "What is your invention?" How does it work?" With respect to each question the description must be correct and full in order that, as Thorson P. said in *Minerals Separation North American Corporation v. Noranda Mines, Limited* :
>
> > ...when the period of monopoly has expired the public will be able, having only the specification, to make the same successful use of the invention as the inventor could at the time of his application.

[37] The following statement was also made by Dickson J. in *Consolboard*, at para. 22:

> Section 36 of the *Patent Act* lies at the heart of the whole patent system. The description of the invention therein provided for is the *quid pro quo* for which the inventor is given a monopoly for a limited term of years on the invention. As Fox points out in *Canadian Patent Law and Practice* (4th ed.), p. 163, the grant of a patent is in the nature of a bargain between the inventor on the one hand and the Crown, representing the public, on the other hand. The consideration for the grant is twofold: "first, there must be a new and useful invention, and secondly, the inventor must, in return for the grant of a patent, give to the public an adequate description of the invention with sufficiently complete and accurate details as will enable a workman, skilled in the art to which the invention relates, to construct or use that invention when the period of the monopoly has expired". The "description" to which Fox refers is that required by s. 36 of the *Patent Act* .

(d) Analysis

[38] As noted earlier with respect to the question of novelty, having found that certain subject matter added by way of amendments submitted subsequent to the filing date of the application was impermissible, the Board considers that the features of the alleged

invention which the Applicant is entitled to maintain in the specification are eye protection equipment for blocking and preventing radiation from a video display terminal from damaging the eyes of the user, the equipment positioned on the user's face and, if the user wears prescription glasses, between the user's glasses and the video display terminals.

[39] Based on the absence of any technical details relating to the composition of the lens, and to how the protective lens is to be constructed, the Board cannot see how the specification could be considered to correctly and fully describe the invention and its operation or use as contemplated by the inventor, as required by Subsection 27(3). Nor do we see how such a scant description could be viewed as setting out clearly the method of constructing, making, compounding or using the device in such full, clear, concise and exact terms as to enable any person skilled in the art or science to which it pertains, or with which it is most closely connected, to make it. It is clear that the description does not give all the information that is necessary for successful operation or use of the invention, without leaving such result to the chance of successful experiment, as was stated to be a requirement of the specification by Thorson P. in the *Minerals Separation* decision. The description fails to disclose correctly and fully how the invention will work, and does not provide the consideration for the grant of a patent, namely, the giving to the public an adequate description of the invention with sufficiently complete and accurate details as will enable a workman, skilled in the art to which the invention relates, to construct or use that invention when the period of the monopoly has expired.

[40] If the subject matter which has been added to the specification by amendment was in fact known to the Applicant on the filing date of the application, it is unfortunate that this matter

was not described in the specification filed on that date. But as things stand, based on the original specification, a person reading this specification would have no assurance that the Applicant had made a complete invention, including sufficient details to make the idea practical. On the contrary, the admission in the original description that "further work is required to decide how to incorporate the element into the glasses" clearly indicates that on this date the invention was not yet complete. For an invention to be complete and apt to receive patent protection, its specification should not be obviously suggestive of experimental or research work. In this regard the following statement by Maclean J. in *Thermionics Ltd. v. Philco Products Ltd.*, [1941] Ex. C.R. 209 at para. 36 is pertinent:

> It is well settled that a specification must be complete without requiring the public to perform further research; a patentee must not set a problem and call it a description.

[41] In the present case, in view of the lack of description with respect to the composition of the protective material and the manner in which the device is to be constructed, we find that the Applicant has not demonstrated by his specification that he had a complete invention at the time of filing.

[42] For the above reasons, the Board finds that the specification does not comply with Subsection 27(3) of the *Patent Act*.

V. ARE THE CLAIMS DEFECTIVE AS MERELY DEFINING A DESIRED RESULT?

(a) The position of the Examiner

[43] In the Final Action the Examiner stated the following with respect to the requirements of

the specification in general, and of the claims in particular:

> The patent application as filed describes eyeglasses, or kind of eyeglasses clip on, to be worn by the user as a protection against CRT monitor radiation. These are the only details given in the description. No claims or drawings are present. These details are only desired result, as no real solution is given on how this protection is achieved. This absence of structural details or procedural steps was addressed in the first examiner=s report, as a non-compliance with subsections 27(3) and 27(4) of the *Patent Act*. This non-conformity is still present and the examiner reinstates that the last valid specification only defines desired results, rather than procedural steps or structural elements necessary, which when carried out, will achieve that result.

(b) The position of the Applicant

[44] In the Applicant=s response to the Final Action, he did not directly respond to these ground for rejection.

(a) Claim requirements: Legal principles

[45] As a preliminary matter, the Board notes that the Final Action refers to Section 27(4) in support of the objection that the claims define only a desired result, rather than the procedural steps or structural elements required to achieve that result. While this was Office practice at the time of the Final Action, the current Office practice is to refer to Section 84 of the *Patent Rules* as providing more explicit authority for such an objection, and the Board will thus consider this objection having regard to Section 84.

[46] Section 84 of the *Patent Rules* reads as follows:

> The claims shall be clear and concise and shall be fully supported by the description independently of any document referred to in the description.

[47] On the question of claims merely defining a desired result, it is well settled that an inventor cannot use functional claiming to obtain exclusive rights to all modes of achieving a particular result regardless of the principle or idea applied. In *Grissinger v. Victor Talking Machine Co.* (1928), [1929] Ex. C.R. 24, we find at page 25:

> However, it must be borne in mind that a principle cannot be the subject of a patent, and a claim to every mode or means of carrying this principle into effect would amount to a claim to a principle, for it was said in *Neilson v Harford* (1841), 1 W.P.C. 295 at 355, that there is no difference between a principle to be carried into affect in any way you will and claiming the principle itself.

[48] And in *British United Shoe Machinery v. Simon Collier* (1909), 26 R.P.C. 21 at 49:

> Assuming [a] principle to be new, it might be possible for the inventor having shown one method of applying it to the solution of the problem, to protect himself during the life of his Patent from any other method of applying it for the same purpose, but I do not think that the novelty of the principle applied would enable him to make a valid claim for all means of solving the problem whether the same or a different principle were applied to its solution.

[49] From these excerpts we conclude that a patent claim that is so broad as to embrace all possible means without qualification for solving a problem facing the inventor and is in effect no more than a restatement of the problem, or desired result, is impermissible.

(b) Analysis

[50] As has been previously decided, the claimed features of the alleged invention which the Applicant is entitled to maintain in the specification are eye protection equipment for blocking and preventing radiation from a video display terminal from damaging the eyes of the user, the equipment positioned on the user's face and, if the user wears prescription glasses, between the user's glasses and the video display terminals, and the claims will be considered as if they contained only these features.

[51] After considering the substantive objection raised in the Final Action with respect to the claim requirements, *i.e.*, that the claims merely define a desired result rather than the procedural steps or structural elements required to achieve that result, we find that a claim defining the features of the alleged invention which the Applicant is entitled to maintain in the specification would be so broad as to encompass any and all eye protective devices to be worn on the face of a user that are capable of blocking radiation emanating from video display terminals from reaching the eyes of the user.

[52] An inventor should not he rewarded beyond what he gives to the public. A claim for any and all means of arriving at a desired result would be broad enough to cover later discovered means wholly independent of the first means for arriving at the same final result. In such cases the inventor would be overprotected.

[53] For the above reasons, we find that the subject matter of the claims that remains permissible, which in effect merely defines a desired result, is so broad as to embrace all possible means without qualification for solving a problem facing the inventor and is in effect no more than a restatement of the problem, or desired result. We follow the legal

authorities cited above in concluding that such a claim is not permissible.

VI. WAS THE CLAIMED INVENTION NOVEL ON THE CLAIM DATE?

(a) The position of the Examiner

[54] In the Final Action the Examiner cited the following prior art reference against the claimed invention:

Reference Re-applied:

United States Patent

5,140, 710	August 25, 1992	2/432 (IPC A61F-9/02)
		Rademacher

[55] Following an identification of the objectionable new subject matter, the Examiner stated:

> Therefore, the last acceptable specification is the specification as filed and amended on September 9, 1997. Regarding the matter present, or that could be inferred from the description as filed, the examiner re-applies the Rademacher patent document as anticipating the specification.
>
> The claim on file does not comply with paragraph 28.2(1)(b) of the Patent Act. Rademacher disclosed the claimed subject matter before the claim date.
>
> As discussed in the examiner=s report of November 12, 1998, the Rademacher patent discloses a shield in the form of wearable eyeglasses comprising layers blocking radiation beam. As such this covers the embodiment present in the original patent specification. Therefore, the current patent

application does not conform, there is nothing patentable, due to lack of novelty, in the current patent application.

The Rademacher patent also discloses the solution of using metallized coatings, including a thin lead foil, details that the applicant has attempted to add through amendment or argument.

...

The claim present in the last acceptable specification is not novel and does not conform with paragraph 28.2(1)(b) of the *Patent Act*.

(b) The position of the Applicant

[56] In the Applicant=s response to the Final Action, he replied to the rejection based on lack of novelty as follows:

[T]he Rademacher patent discloses coatings and a shield in forms much narrower and less versatile than that applied for by the applicant whose invention would be used and removed by the consumer him or herself; not applied or attached to the equipment used by the consumer; hence the novelty of the entire invention as first proposed in 1997.

(c) Novelty: Legal principles

[57] The requirement that an invention, to be patentable, must be novel is set out in Subsection 28.2(1) of the *Patent Act*. This subsection reads as follows [emphasis added]:

28.2 (1) The subject-matter defined by a claim in an application for a patent in Canada (the "pending application") must not have been disclosed

(a) more than one year before the filing date by the applicant, or by a person who obtained knowledge, directly or indirectly, from the applicant, in such a manner that the subject-matter became available to the public in Canada or elsewhere;

(b) before the claim date by a person not mentioned in paragraph (a) in such a manner that the subject-matter became available to the public in Canada or elsewhere;

(c) in an application for a patent that is filed in Canada by a person other than the applicant, and has a filing date that is before the claim date; or

(d) in an application (the "co-pending application") for a patent that is filed in Canada by a person other than the applicant and has a filing date that is on or after the claim date if

(i) the co-pending application is filed by

(A) a person who has, or whose agent, legal representative or predecessor in title has, previously regularly filed in or for Canada an application for a patent disclosing the subject-matter defined by the claim, or

(B) a person who is entitled to protection under the terms of any treaty or convention relating to patents to which Canada is a party and who has, or whose agent, legal representative or predecessor in title has, previously regularly filed in or for any other country that by treaty, convention or law affords similar protection to citizens of Canada an application for a patent disclosing the subject-matter defined by the claim,

(ii) the filing date of the previously regularly filed application is before the claim date of the pending application,

(iii) the filing date of the co-pending application is within twelve months after the filing

> date of the previously regularly filed application, and
>
> (iv) the applicant has, in respect of the co-pending application, made a request for priority on the basis of the previously regularly filed application.

[58] One commonly cited test for assessing novelty was set out by the Federal Court of Appeal in *Beloit Canada Ltd. v. Valmet Oy* (1986), 8 C.P.R. (3d) 289 at 297:

> One must, in effect, be able to look at a prior, single publication and find in it all the information which, for practical purposes, is needed to produce the claimed invention without the exercise of any inventive skill. The prior publication must contain so clear a direction that a skilled person reading and following it would in every case and without possibility of error be led to the claimed invention.

[59] As prescribed in Subsection 28.2(1), the relevant date for assessing novelty (ignoring any consideration of the one year grace period afforded an applicant with respect to self-disclosure of the invention, as no such disclosures have been alleged) is the claim date. In the present case, in which there has been no request for priority, it is the Canadian filing date of the application, which is June 27, 1997.

(d) Analysis

[60] In the vast majority of cases, a novelty assessment involves a comparison of the invention as claimed to a single prior art reference. However, this approach presumes that the Applicant is entitled to claim all of the subject matter defined by a claim. In the present instance, having found that subject matter added by way of amendments submitted subsequent to the filing date of the application, as noted earlier, was impermissible, the

Board will therefore not consider the claims as they presently appear in the application, but will rather consider them as though the objectionable matter were not included.

[61] As a result, the claimed features of the alleged invention which the Applicant is entitled to maintain in the application are eye protection equipment for blocking and preventing radiation from a video display terminal from damaging the eyes of the user, the equipment positioned on the user's face and, if the user wears prescription glasses, between the user's glasses and the video display terminals.

[62] The cited prior United States patent to Rademacher teaches an eye shield for blocking and preventing radiation from damaging the eyes of the user while permitting the transmission of light, the shield in the form of wearable eyeglasses or goggles including lenses formed from a supporting sheet on which a metallized coating is applied, and a second lead-containing layer, where the shield is positioned on the user's face and, if the user wears prescription glasses, between the user's glasses and the source of the radiation.

[63] The Board notes that Rademacher is designed to provide protection against X-radiation, whereas the Applicant states that the intention of his device is to protect against radio waves emanating from video display terminals, or computer monitors. However, we also note the structural features of the device which the Applicant attempted to have considered as part of his invention, namely, a shield of micro thin, lightweight metal, a thin layer of lead or gold applied to the screen, and a microscopically-perforated, elastic, aerated lens of between 0.5 and 0.25 cm in thickness. According to the amendments submitted by the Applicant, this combination of features would achieve the result of blocking radiation from video display terminals. However, these features are disclosed by Rademacher. If we accept that the device which the Applicant attempted to claim would achieve the desired result, we must conclude that the prior device disclosed by Rademacher would do so, as well.

[64] In view of the foregoing, we find that the combination of claimed features of the alleged invention that the Applicant is entitled to maintain, which in effect amounts to little more than a statement of the problem to be solved, reads on and is thus anticipated by the Rademacher reference, and contravenes Paragraph 28.2(1)(b) of the *Patent Act*.

VII. RECOMMENDATIONS

[65] In summary, the Board recommends that:

(1) the Examiner=s rejection of subject matter added by amendment subsequent to the filing date as not complying with Subsections 38.2(2) and (3) of the *Patent Act* be upheld;

(2) the Examiner=s rejection of the specification as not complying with Subsection 27(3) of the *Patent Act* for failing to correctly and fully describe the invention be upheld;

(3) the Examiner=s rejection of the claims for merely defining a desired result rather than the procedural steps or structural elements required to achieve that result be upheld; and

(4) the Examiner=s rejection of the claims as contravening Paragraph 28.2(1)(b) of the *Patent Act* as lacking novelty be upheld.

Paul Fitzner	Stephen MacNeil	Paul Sabharwal
Member	Member	Member

[66] I concur with the findings and recommendation of the Patent Appeal Board. Accordingly, I refuse to grant a patent on this application. Under Section 41 of the *Patent Act*, the Applicant has six months within which to appeal my decision to the Federal Court of Canada. The Applicant is further advised that the current status of the application is

abandoned for failure to pay the maintenance fee. Since an appeal to the Federal Court cannot be taken on a Decision of the Commissioner regarding an application which is no longer in effect, if the Applicant wishes to maintain the right to appeal, the application must be reinstated by June 27, 2008.

Mary Carman

Commissioner of Patents

Dated at Gatineau, Quebec,

this 18th day of June, 2008