

Commissioner’s Decision # 1268
Décision du Commissaire # 1268

TOPIC: O
SUJET: O

Demande no: 2,265,866

COMMISSIONER'S DECISION SUMMARY

C.D. 1268

App'n 2,265,866

Obviousness

This application is directed to a nail file which is formed of a single integral stratum of glass. The file is formed with an abrading surface having an irregular texture, formed by processes such as acid engraving or sanding. The examiner rejected this application on the basis that the invention claimed was obvious at the claim date, in view of a combination of prior art consisting of a Swiss patent and a United States patent. The Board found that the applicant was claiming an invention which was not obvious in view of the cited references.

The application was returned to the examiner for further prosecution.

IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application number 2,265,866 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:

Agent for the Applicant

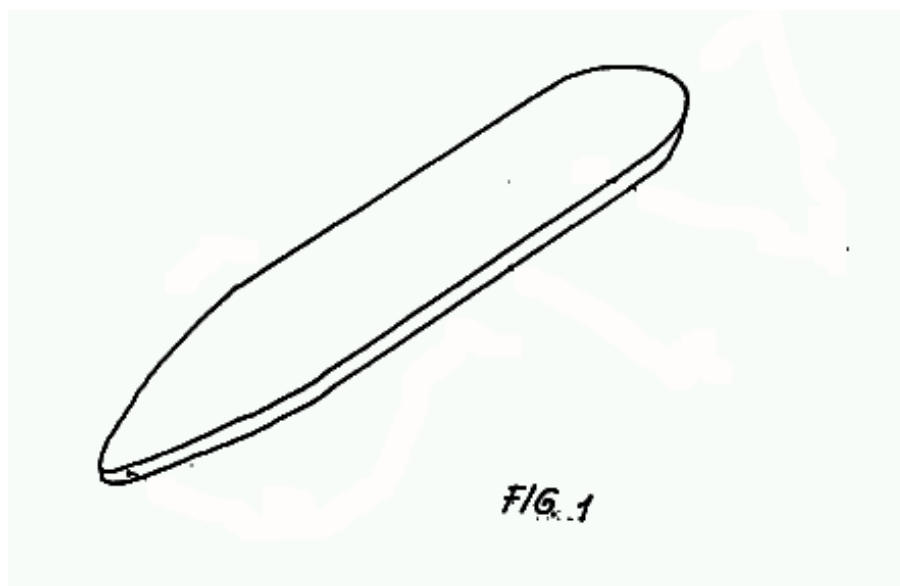
GOWLING LAFLEUR HENDERSON LLP

2600-160 Elgin Street
OTTAWA Ontario
K1P 1C3

This decision deals with a request that the Commissioner of Patents review the Examiner's Final Action on patent application number 2,265,866 which was filed on July 9, 1998, and is entitled "FILE, PARTICULARLY NAIL FILE". The Applicant and inventor is Dalibor Blazek. The Examiner in charge issued a Final Action on January 6, 2005 refusing claims 1 to 11 as being obvious in view of Swiss Patent No. 237,277 to Billon, with further regard to United States Patent No. 4,422,465 to Haga.

At the Applicant's request, the Patent Appeal Board conducted a hearing on May 25, 2005, at which time the Applicant was represented by Mr. Bruce E. Morgan of the firm Gowling Lafleur Henderson LLP. The Patent Office was represented by Ms. Elizabeth Matthes, the Examiner presently in charge of the application, and her Section Head, Mr. Benôit Bourgon.

The invention relates to a file, particularly a nail file, which is formed as a single integral stratum comprising glass. The file is said to have an irregular texture and varying surface roughness.



The file may be of varying shape and may be formed of different types of glass. Fig. 1 of the application illustrates the general configuration of the file:

The application contains two independent claims 1 and 2 as follows:

1. A nail file, comprising a body, said body comprising first and second sides, first and second edges, a first end, and at least one abrading surface, said abrading surface comprising an irregular texture having a roughness that varies from about 10µm to about 100µm, wherein said body, first and second sides, first and second edges, first end, and said at least one abrading surface are formed of a single, integral stratum, said integral stratum comprising glass.
2. A file, particularly a nail file, characterized by the fact that the body of the file, including its surface, is formed of a single, integral stratum made of glass, where the abrading surface is situated on at least part of the surface and has an irregular texture, with a roughness varying from 10 to 100µm.

In her final action, the Examiner refused the claims of the application as being obvious in view of Swiss Patent No. 237,277 to Billon with further regard to US Patent No. 4,422,465 to Haga, stating in part that:

Billon discloses a nail file composed of glass in which one side of the glass file has a series of parallel teeth cut into the file (disclosure, page 1, lines 20-26). Billon does not explicitly disclose an irregular textured surface with a surface roughness of 10-100 microns. Haga discloses a nail file with an irregular textured surface with a surface roughness of 10-100 microns (figure 1, 2, and 5, col.2, lines 56-69). It would be obvious to person skilled in the art to fabricate the file of Billon with an irregular textured surface and surface roughness of Haga.

.....

Even though Billon's glass nail file as disclosed in the first embodiment may not have been the most ideal embodiment of the invention at that time, Billon still disclosed a first embodiment comprising a single integral stratum of glass.

.....

The examiner cites the Haga nail file to show that the range of surface roughnesses were known in the art. The method in which the surface roughness was created is irrelevant. A person skilled in the art would be familiar with nail files as a whole, regardless of the material that they are created from.

.....

The randomly spaced, irregular shaped concave portions of Haga's nail file create an irregular texture. Whether or not the abrading characteristics of the applicant's nail file are better than the nail file of Haga is irrelevant.

In the reply of March 9, 2005 to the Final Action, the applicant stated in part that:

Billon discloses a polishing file and a method for fabricating the file. Billon avers that prior files have been made exclusively of metal (apparently unaware that card or wood files had also been made). Billon suggests a polishing file "characterized in that at least a portion of its thickness, in which the teeth are situated, consists of a glassy material (e.g. glass, crystal, synthetic ruby or vitrified materials such as enamel", page 1, lines 4-8).

In a first embodiment (page 1, lines 20-26), Billon states: "one can take a strip of transparent or opaque glass, for example, into which a series of parallel teeth are cut by means of a grinding wheel, which are continuous along their entire length and extend from one edge of the strip to the other." This embodiment does not explicitly recite a metal backing.

.....

Both the specification and the broad claim recite a file in which "at least a portion of its thickness in which the teeth are situated consists of a glassy material." This phraseology suffers from a lack of clarity. It may be inferred that the file has a

thickness in which the teeth are situated, and at least a portion of that thickness is a glassy material. Alternatively, it may be inferred that the file has a thickness of which a portion is glassy material and into which portion teeth are cut. Thirdly, it may imply that the file has a thickness, at least a portion, or all of which thickness, is a glassy material, and teeth are cut into that glassy portion. In the third interpretation, all of the file thickness may be glassy material with the teeth cut into the glassy material.

The first two interpretations require a glassy portion, and therefore imply a further portion, namely a metal backing, with teeth cut partially or wholly through the glassy portion. These are operable embodiments. In the third interpretation, the glassy portion (clearly not an enamel), might be 100% of the thickness, with teeth cut into it. As previously submitted to the Examiner, and discussed hereafter, this “all-glass/cut tooth” embodiment is inoperable.

Both of the disclosed embodiments and the general disclosures, as well as the claims, are consistent with the first two interpretations, but not with the third extreme (“all-glass”) interpretation. Of the two embodiments disclosed, only the first embodiment can conceivably be stretched to include the inoperable third “all glass” interpretation, but such interpretation also precludes many of the examples of “glassy material”, such as vitrified materials, which would not work.

In the applicant’s view, consistent with the above analysis, Billon necessarily discloses a laminated file. The file is characterized in that “at least a portion of its thickness, in which the teeth are situated, consists of a glassy material.” From this, it is apparent that Billon discloses a glassy portion into which the teeth are cut. Although the Examiner has intimated that “at least a portion — is glassy material” includes 100% glass, this is not the implication to a person skilled in the art. Rather, Billon implies that the teeth are cut in a glassy portion of the file, at a maximum cutting the teeth 100% through the glass portion. This still implies there is a further part of the file, i.e. the metal substrate.

Anyone remotely skilled in the mechanical arts would realize that cutting a groove in a glass surface would generate grooves having angular intersecting faces, which, under the stress and flexure applied during use of the file, would produce stress concentrations at the angles. Such stress concentrations, if applied to a single stratum of glass, would result in breakage of the file. Although the Examiner has asserted Billon discloses a file of a single stratum of glass, this clearly would be a useless device.

Rather than the single glass stratum asserted by the Canadian Examiner, the Applicant, and apparently the Examiners in other patent offices, understand that Billon discloses a useful file, one in which glassy material (glass, crystal, ruby, enamel, etc.) is applied to a metal support, and when fully hardened or applied to the metal support, teeth are cut. The first embodiment discusses the material, i.e. glass, while the second embodiment discloses an enamel finish, coated in one or more layers on a metal supporting surface. The second embodiment cross references the first embodiment for cutting of the teeth.

Nothing in the disclosure suggests that the Billon first embodiment is made entirely of glass. Billon does not draw a distinction between the use of glass or enamel in his two embodiments, and there is no reason to believe that his structure in the two examples is any different. In both embodiments, the teeth are cut by means of a grinding wheel.

.....

[T]he examiner relies upon Haga for disclosing a particular method of construction of a nail file in which “blades” are created by a novel method of construction. The blades result from an array or pattern of undercut pockets formed in the metal blade by an etching process. Firstly a photosensitive resin is applied to any metal surface, then the surface is photographically printed with a pattern for the blades/teeth, and etchant is then applied to the treated blade, eating an undercut pocket at areas where the metal is exposed. These pockets are illustrated in the drawings, and can have concave portions having a diameter of 100 to 300 microns and depth of 10 to 80 microns, at least 10 to 100 microns separating edges.

Haga’s depth dimensions of 10 to 80 microns is in the same range as Applicant’s surface roughness of 10-100 microns. However, the “roughness” of Haga is entirely different, being an engineered matrix of undercut pockets, which define sharpened cutting edges. Nothing in Haga remotely resembles the etched or sandblasted surface of glass. In fact, if the Haga metal file were etched or

sandblasted as in Blazek’s application, the specialized undercut pockets could not be achieved. Furthermore, there is nothing in the art or the references to suggest the combination of Haga with Billon, and even if the combination were made, it would not achieve any structure remotely resembling the present invention by Mr. Blazek. Haga “pockets” are a structured array, and unlike a metal surface, could not be undercut into glass.

With the reply of March 9, 2005, was submitted an affidavit from the inventor and applicant Dalibor Blazek, in which he discussed the advantageous features of his particular nail file and how it is distinguished from the Billon reference, the discussion being similar to that of the reply itself.

At the Patent Appeal Board hearing of May 25, 2005, applicant submitted a Memorandum of Argument for consideration by the Board. In this memorandum the applicant reiterated the position that the claims were not obvious in view of Billon and Haga. The applicant provided various examples of relevant jurisprudence on the issue of obviousness in support of his contention that the invention as defined by claims 1-11 would not have been obvious.

Applicant also included a copy of the Swiss patent to Billon, along with an English language translation thereof, a copy of the US patent to Haga, and a copy of the affidavit of the inventor/applicant Mr. Blazek. The Board will rely on its own independent translation of the Billon patent. In the written arguments presented, which were summarized at the hearing, the applicant stated in part that:

Based upon the tests for obviousness, Billon must lead a person skilled in the art, familiar with prior art files, but without any curiosity or investigative inclination, directly and without difficulty to the solution of the present application.

This hypothetical skilled person cannot possibly conceive that the Billon file with teeth cut in the glassy portion would provide the file of the present invention. A person skilled in the art would not conclude that Billon discloses a single integral stratum of glass (albeit one embodiment is silent whether there is a metal substrate for a strip of transparent or opaque glass whereas the other embodiment is quite clear that there is a metal substrate for the glass material). Such a hypothetical file would not work. It would break where the teeth are ground across the entire blade. Rather, a skilled person would immediately realize the metal backing of the second embodiment would also apply to the first embodiment. At best the disclosure is ambiguous. Ambiguity is not sufficient to provide the required guidance towards the claimed invention.

.....

Billon does not “clearly and without difficulty” lead a person skilled in the art to the present Blazek invention. Nor does Haga. Although Haga discloses a metal specialty file, which incidentally has the same roughness parameters as the present Blazek invention, it is an entirely different structure with very carefully designed blade portions. Certainly Haga’s patterned etching of pockets does not disclose the irregular textured surface contemplated by Blazek

There is nothing in either of the cited references of Billon or Haga to suggest potential for co-operation or combination. The metal etching process of Haga has absolutely no application to the glassy material of Billon. Rather, Billon requires cutting of teeth in the glassy material while Haga identifies and distinguishes itself from files with cut teeth (column 1, lines 43-47).

In forming a decision as to the obviousness of the present claims 1-11, the Board is guided by the criteria set out in the Canadian courts. In *Beecham Canada Ltd. v. Proctor and Gamble Co.* (1981), 56 C.P.R. (2d) 214 (F.C.T.D.), *aff’d* (1982), 61 C.P.R. (2d) 1 (F.C.A.), leave to appeal

refused (1982), 63 C.P.R. (2d) 260 (S.C.C.), it was stated that:

The question to be answered is whether at the date of invention ... an unimaginative skilled technician, in light of his general knowledge and the literature and information on the subject available to him on that date, would have been led directly and without difficulty to [the] invention.

This question was further refined in *Beloit Canada Ltd. v. Valmet Oy* (1984), 78 C.P.R. (2d) 1 (F.C.T.D.), rev'd (1986), 8 C.P.R. (3d) 289 (F.C.A.):

The test for obviousness is not to ask what competent inventors did or would have done to solve the problem. Inventors are by definition inventive. The classical touchstone for obviousness is the technician skilled in the art but having no scintilla of inventiveness or imagination; a paragon of deduction and dexterity, wholly devoid of intuition; a triumph of the left hemisphere over the right. The question to be asked is whether this mythical creature (the man in the Clapham omnibus of patent law) would, in light of the state of the art and of common general knowledge as at the claimed date of the invention, have come directly and without difficulty to the solution taught by the patent. It is a very difficult test to satisfy.

Recently in *Genpharm Inc. v. Proctor & Gamble Pharmaceuticals Canada, Inc.* (2004) 37 C.P.R. (4th) 289 at 302 (F.C.A.), Rothstein J.A. affirmed the applicability of the test as set forth in *Beloit v. Valmet Oy*, *supra*.

In having regard to the prior art, the hypothetical person skilled in the art must be careful to avoid an *ex post facto* or hindsight analysis. In *Apotex Inc. v. Wellcome Foundation Ltd.* (2000) 10 C.P.R. (4th) 65 at 85-86 (F.C.A.), allowing appeal in part (1998) 79 C.P.R. (3d) 193 (F.C.T.D.), affirmed (2002) 21 C.P.R. (4th) 299 (S.C.C.), Malone J. A. stated:

The test for obviousness is whether the notional technician, devoid of inventiveness, but skilled in the art would, in light of the state of the art and of common general knowledge at the date of the invention, have come directly and without difficulty to the solution taught by the patent. This is a difficult onus to discharge.

.....

Care must be taken to guard against the danger inherent in hindsight analysis that an invention may appear obvious after the fact which was not obvious at the time of the invention.

In *Almecon Industries Ltd. v. Nutron Manufacturing, Ltd.* (1996) 65 C.P.R. (3d) 417 at 437 (F.C.T.D.), affirmed (1997) 72 C.P.R. (3d) 397 (F.C.A.), Wetston J. stated:

[T]he unimaginative skilled technician, who possesses the common general knowledge of the relevant technological field, must look at the available prior art, without engaging in an *ex post facto* analysis, and determine whether the invention would be arrived at directly and without difficulty

...

Something is said to be obvious when it would occur directly to an ordinary person skilled in the relevant art, searching for something novel without serious thought, research, or experiment.

Further, only a “scintilla of inventiveness” will do, *Beloit v. Valmet Oy*, *supra*, *Diversified*

Products Corp. v. Tye-Sil Corp. (1991) 35 C.P.R. (3d) 350 at 365 (F.C.A.).

In assessing the obviousness of claims 1-11 of the present application to Blazek, the Board must answer the question:

Would the hypothetical “person skilled in the art”, in light of the state of the art as shown by Swiss Patent No. 237,277 to Billon, and US Patent No. 4,422,465 to Haga, and the common general knowledge as at the claim date, have come directly and without difficulty to the claimed invention?

The broadest form of the invention is given by claims 1 and 2. Claims 1 and 2 each recite a file formed of a single integral stratum of glass with an “irregular texture”. Although the term “irregular texture”, is not used per se in the description of the subject application, and therefore its meaning is not entirely clear on its own, it is, as stated by Urie J. in *Beecham Canada Ltd. v. Proctor & Gamble Co.* (1982) 61 C.P.R. (2d) 1 at 11, refusing leave to appeal (1982) 56 C.P.R. (2d) 214 (S.C.C.), acceptable:

that in construing the claims in a patent recourse to the remainder of the specification is (a) permissible only to assist in understanding terms used in the claims; (b) unnecessary where the words of the claim are plain and unambiguous; and (c) improper to vary the scope or ambit of the claims.

Looking to the description, it is clear that the glass file is to be “roughened”, which is stated repeatedly, both in the Summary of Invention and the Description of the Preferred Embodiments sections. Examples are given as to how to obtain this “roughening”, namely at page 3:

To produce the smoothest finish ... a chemical process can be used, such as acid engraving with a hydrogen fluoride solution. Greater roughness, of around 100µm for instance, can be produced mechanically, by sanding for example.

Such processes would indeed produce a surface with an “irregular texture”. Such a surface would not have any clearly defined pattern, nor is it suggested by the specification or drawings that it should. The arrangement of depressions and peaks could not be controlled to any certain degree, other than to ensure some overall average roughness.

Having looked at what is claimed by the applicant, the Board must now look to the prior art to determine whether the skilled person would have come directly and without difficulty to this invention.

Looking to the prior art, firstly to the Billon reference, this document (which is published in French, but reference will be made to the English translation), discloses a polishing file and method of manufacturing the same. The file, as disclosed is, as at page 1, lines 4-6, characterized in that :

at least the part of its thickness in which the teeth are cut, is made of vitreous material ...

At page 1, lines 11-13, it is stated that the method of fabricating the file is characterized in that:

the teeth are cut into the above mentioned vitreous material at the final degree of hardness.

Billon then goes on to discuss two possible embodiments by which the invention may be realized.

In the first embodiment it is said at lines 20 to 26, that:

One form of execution entails using a blade of clear or opaque glass, for example, into which a grinding wheel grinds a series of parallel teeth, continuous over their entire length, extending from one edge of the said blade to the other.

In the second embodiment Billon proposes, at page 1, lines 27-41 that:

In another form of execution, a blade-shaped metal support, for example, of which at least one large face is coated with a layer of vitrified material, such as enamel, to a thickness at least equal to the height of the teeth desired. Once this layer of vitrified material has attained the desired final degree of hardness, the file teeth are cut into it using the method described above for the first form of execution, for example. Of course, the support can be completely coated with the vitrified material and teeth cut on each of its large faces.

The Examiner, in her Final Action, contends that the first embodiment discussed in Billon illustrates a nail file formed completely of glass. Apparently, this contention is based on the fact that Billon, in his discussion of the first embodiment, referred solely to a “blade of clear or opaque glass ...into which a grinding wheel grinds a series of parallel teeth”. It is not stated in this embodiment whether or not any metal supporting member is used with the strip of glass, as it is in the second embodiment. If one were to read this passage in isolation it could be interpreted as encompassing a situation where the file is formed completely of glass. This interpretation would however, be based purely on a literal interpretation of the passage, without considering the context in which it is used. It is worthwhile to note the words of the first paragraph of this patent, namely:

The polishing files that are currently used are made exclusively of metal. This invention includes a polishing file characterized in that at least the part of its thickness, in which the teeth are cut, is made of vitreous material.

This passage would seem to suggest that rather than a file formed entirely of metal, as in the prior art, at least the part of the thickness in which the teeth are situated, or possibly a larger portion of the overall thickness, is formed of a vitreous material. However, it would also seem to suggest that there is still a portion of the thickness of the file, as a whole, which is formed of metal. This passage is, as applicant has stated, ambiguous at best. Applicant has argued that if one were to follow the reasoning of the Examiner and cut a series of parallel teeth into a file made entirely of glass, that the resultant file would not be useful and would break very easily at the portions where

the parallel teeth are cut into the glass. The Board would agree with this argument, as any strip of glass which is scored or cut would break more easily at such a stress concentration. The skilled person would have realized this as well, and it is hard to imagine that he/she would have been led to forming the entire file of a single integral stratum of glass and cutting a series of parallel teeth into it.

In relation to the two embodiments described, these would seem to differentiate two methods of fabrication, one where the teeth are cut into the glass before it is mounted on some sort of metal backing, and one where the backing is first coated with glass and subsequently the teeth are formed in the glassy portion.

Based on the above observations, the disclosure of Billon would not suggest forming a file of a single integral stratum of glass. The Board concludes that a skilled worker would be led away from constructing a file entirely of glass because the series of parallel teeth would render the file inoperative. Moreover, as Billon refers solely to cutting a series of parallel teeth in the file, such a process would not form an “irregular texture” in the sense that it is used in the instant application. In light of the deficiencies of the Billon reference, the Board will now look to the Haga reference to ascertain whether or not it would have provided any further guidance to lead the person skilled in the art towards the claimed invention.

The Haga reference discloses a nail file and method of producing the same. The invention attempts to improve upon conventional metal nail files by using a photo-etching technique to form a number of concave portions, which are arranged in a “random or irregular” pattern. The depth of the concave portion is to be in the range of 10-80µm. The concave portions are formed, as disclosed, by first degreasing the surface and then coating it with a photo-sensitive resin layer. An original negative image of the desired pattern of the file teeth is prepared and the resin layer is irradiated through the negative film to print the patterns on the resin layer. The image is developed, and the back surface is coated with a resin coating composition. The metal plate is then etched to the desired depth. It is further stated that any conventional photo-etching technique may be used. No suggestion is made that a file formed entirely of glass could be formed by such a technique.

Clearly, contrary to the examiner’s assertions, while Haga uses the words “random” and “irregular” to describe the arrangement of the concave portions, this arrangement is neither random, nor irregular, as it is defined by the particular pattern printed on the metal plate. Consequently, the word “irregular” is not used here in the same sense as the present Canadian application, in which by processes such as acid engraving or sanding, the surface would be quite irregular, as its configuration would not be accurately controlled, as in the Haga reference.

As the Haga reference suggests to the skilled person, neither forming a file of a single integral

stratum of glass, nor forming a file with an “irregular texture”, in the sense it is used in the instant application, it does not aid in leading the person skilled in the art towards the invention as defined by Claims 1 or 2.

As a result, the Board is of the opinion that the person skilled in the art would not have come directly and without difficulty to the invention as claimed, in light of the common general knowledge in the art, and the state of the art, as defined by the Billon and Haga references.

The Board concludes that claims 1-11 comply with Section 28.3 of the Patent Act.

It is further noted that some minor amendments to the language of the claims may be necessary to ensure compliance with the Patent Act and Rules. For example, the subject matter of claim 8, which specifies that the “edges” are rounded, appears to be incompatible with claim 5, on which it depends, which states that “the body ... is beveled to a sharp finish on at least one edge”.

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 consistent with the recommendation.

M. Wilson
Member

J. Cavar
Member

S. MacNeil
Member

I concur with the findings and recommendation of the Patent Appeal Board that the Examiner’s rejection of the claims be reversed, and return the application to the Examiner for further prosecution consistent with the Board’s recommendation.

David Tobin
Commissioner of Patents

Dated at Gatineau, Quebec,
this 24th day of November, 2006