

COMMISSIONER'S DECISION

OBVIOUSNESS: Light Reflecting Metal Particles in Thermoplastic Sheet

Applicant amended the claims after the Hearing to include the specific light reflecting material used in the plastic sheet material. Applicant's arguments were accepted that amendments under Rule 52 to include certain ranges in the disclosure were proper. Rejection modified.

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Patent application 315,073 was filed on October 31, 1978 in class 400, subclass 72, for an invention entitled Metal Filled PE Formulations and Fabrics. The Examiner took a Final Action on February 5, 1980 refusing to allow it to proceed to patent. The Patent Appeal Board held a Hearing on May 20, 1981 at which Mr. E. Fincham represented the Applicant, Consolidated Bathhurst Limited. Mr. D. Helleur was also present as the Company Patent Officer.

The subject matter relates to a protective plastic sheet particularly suitable for protecting articles to be stored outdoors. The sheet includes finely divided metal particles useful for reflecting harmful sunlight. Also included is an additive known in the trade as Irganox MD-1024 which acts as a metal deactivator and antioxidant. These properties extend the useful life of the plastic sheet since degradation due to an outdoor environment is substantially reduced.

In the Final Action the Examiner rejected all claims because of the disclosure in 2 pages of the Modern Plastics Encyclopedia, Volumes 52 and 53, published in 1975 and 1976. The pages were respectively entitled Antioxidants Chart, and Stabilizers Chart. They briefly indicate that Irganox MD-1024 is both an antioxidant as well as a metal deactivator for copper, as an example. The Examiner took the position that it was obvious to include a known plastic additive with a known metallic deactivator property in a plastic when metal particles are included in the plastic matrix.

The Examiner additionally made a subsidiary objection respecting proposed amendments to pages 12 and 13 in Applicant's response of July 18, 1979. He indicated that new matter was being proposed which could not be reasonably inferred from the specification as originally filed. The amendment of page 12 included additional quantitative details of metallic powder (30%) and Irganox MD-1024 (0.5%) in the master batch. The amendment of page 13 provided the names of two ultraviolet screen additives including a specific concentration of 0.3% by weight for each one. He finally refused entry of the amendments since in his view they did not fall within the ambit of Rule 52.

In response to the Examiner's objection respecting prior art the Applicant stated (in part):

In his rejection, the Examiner has cited the two references which are substantially identical. Applicant does not dispute the teachings of these references insofar as they disclose that IRGANOX MD 1024 is a known antioxidant recommended for use with various thermoplastic materials and that it is known as a metal deactivator. The teachings of the references are believed to be clear.

However, it is respectfully submitted by applicant that the references are clearly deficient in teaching the essence of the present invention as defined in the claims. Thus, applicant is claiming a method of preparing a stabilized protective material, which method includes combining three materials and extruding the same. It is the combination of the three materials - i. e. the thermoplastic material, the metal particles and Irganox MD 1024 which provides applicant with the substance of his invention. Applicant is not claiming the combination of a thermoplastic material and Irganox MD 1024, nor is he claiming that the particular combination of components as a composition of matter suitable for any purpose. Rather, he is claiming a stabilized extrudate suitable for prolonged outdoor exposure and a method of preparing a stabilized protective material. The art teaches that Irganox MD 1024 may be added to a thermoplastic material and indeed, to a thermoplastic material containing metal particles. However, it does not teach the specific method and specific end product defined in the claims.

In greater detail, the Examiner has commented that applicant is using an additive for the advertised purpose to achieve an advertised result. It must again be reiterated that this is not what the

teachings of the references constitute. The reference does not state that employing Irganox MD 1024 in combination with metal particles in a thermoplastic material will result in a product which has improved properties and in particular, which prevents degradation of the thermoplastic material. The Examiner appears to have taken the position that because Irganox MD 1024 is a known antioxidant, then the combination of the three components is obvious. The teachings of the references must be taken for what they are and it must be recognized that the teachings are merely that Irganox MD 1024 is an antioxidant and is known to deactivate metals. This does not, however, support a finding that a claim directed to a method of improving the degradation properties of a thermoplastic by adding thereto both the antioxidant and the metal particles is obvious.

Respecting the objection under Rule 52 the Applicant stated (in part):

It is respectfully submitted by applicant that Rule 52 must not be interpreted in a vacuum but rather interpretation should be guided by pertinent sections of the Patent Act and Patent Rules. Thus, Section 36 of the Patent Act requires that an applicant correctly and fully describe the invention and its operation or use as contemplated by the inventor. Applicant has complied with this requirement and as the Examiner has not made any objection under 36, it is believed that the Disclosure does adequately set forth and define the invention.

Secondly, one may refer to Section 50 dealing with reissue of Patents wherein it is stated:

"Wherever any Patent is deemed defective. . . by reason of insufficient description or specification. . . but at the same time it appears that the error arose from inadvertence, accident or mistake, without any fraudulent or deceptive intention, the Commissioner may. . . cause a new Patent in accordance with an amended description and specification. . . to be issued to him for the same invention. . ."

Thus, it would appear that an applicant may, by reissue of a Patent, add matter to the Disclosure under certain defined circumstances. It is respectfully submitted that the matter which applicant, in the instant application, proposes to add to the Disclosure, would clearly fall within the scope of that matter defined by Section 50 of the Patent Act. Bearing in mind that no objection has been made to the Disclosure under Section 36 of the Patent Act, it would thus appear that applicant could conceivably be able to issue the instant application as a Patent without the proposed changes to pages 12 and 33 and subsequently under the provisions of Section 50, apply for a reissue to add this matter to the Patent. Such a course of action would appear to be somewhat illogical.

Moreover, and apart from the above, it is respectfully submitted that the subject matter proposed to be added on pages 12 and 13 of the Disclosure does not fall within the scope of matter prohibited under Rule 52.

Initially, attention is directed to the decision of the Commissioner of Patents in Application No. 047,327 as reported in the Patent Office Record, Vol. 102, No. 16, April 16, 1974. In that decision, the Commissioner held:

"Of interest in the determination of this case is the consideration of the Court in *Minerals Separation v. Noranda Mines Ltd.*, (1947) Ex. CR. 306, wherein Thorson P. stated at page 319:

"'When it is said that a specification should be so written that after the period of monopoly has expired the public will be able with only the specification to put the invention to the same successful use as the inventor himself could do, it must be remembered that the public means persons skilled in the art to which the invention relates, for a patent specification is addressed to such persons.'

And at page 319 he also stated:

'There is no doubt that the specification is not well drawn, but there is a vital difference between imperfections of draftmanship and non-compliance with statutory requirements. (Emphasis added).'

Thus the issues appear, first as to whether the application as filed has complied with the statutory requirements of Section 36 of the Patent Act keeping in mind the instruction that there is a vital difference between imperfections of draftmanship and non-compliance with the statutory requirements, and second as to whether the amended definition of the dry specific surface of the plaster after wetting is admissible under Section 52 of the Patent Rules as matter reasonably to be inferred by persons to whom the specification is addressed."

A further decision of the Commissioner which is of interest is that pertaining to Application 139,256 as reported in the Patent Office Record, Vol. 106, No. 27, issued July 4, 1978. In particular, it is noted that the Commissioner held:

"In view of the above consideration, we are constrained to conclude that the applicants should be permitted to amend the disclosure to introduce the additional data in order to more fully comply with the requirement 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". (vide, *Mineral Separation v. Noranda*, supra) It is our opinion that it falls under the heading of imperfection of draftmanship rather than non-compliance of statutory requirements."

In connection with the above, it should be noted that the subject matter added to this application, as previously noted by applicant, is not material which was discovered subsequent to the filing date of this application. The subject matter which applicant is attempting to add is merely to provide more information to the public. The additional subject matter is not required to fully support the claims and there is no consideration of the subject matter covering matter which was discovered after the filing date of the application.

Accordingly, in view of the above, it is respectfully submitted that the rejection under Rule 52 is not proper and that the proposed amendments to the Disclosure should be allowed.

The issues before the Board are whether or not the claims are acceptable in view of the cited art and whether amendments to pages 12 and 13 are acceptable under Rule 52. We will first consider the rejection of claims in view of the cited art.

At the Hearing, Mr. Fincham stated the purpose of the inventor was to improve longevity of plastic wrapping when used as a protective cover for outdoor storage of lumber. The scrim previously used had a useful life of two years but the inventor found this period could be extended by incorporating finely divided metal particles into the plastic. He further indicated that a processing problem occurred when the metal filled plastic was extruded at high temperature onto a polypropylene scrim used as a strength member. This was overcome by addition of Irganox MD-1024 to the metal filled plastic since it was both a metal deactivator and antioxidant. It was this latter ingredient which was the key to making the invention fully operable. He admitted using metal particles in a plastic matrix for radiation shielding of electronic equipment was known but he emphasized that its use in a protective cover material was not previously known. He then stated that the inventive product enjoyed substantial commercial success since its lifetime was double that of previously known wrapping. He then directed his attention to the references cited by the Examiner and he disputed that the combination of the three elements in the claims was obvious from the references. However, he indicated that the form of the claims could be improved to be more specific respecting method of use. He then agreed to amend the claims to more clearly define the invention.

On May 21, 1981 an amendment was filed which proposed the substitution of claims 1 to 10 for those on file. Representative claim 6 is reproduced below:

6. A sheet material for protecting a product to be stored outdoors, the sheet material comprising a layer of thermoplastic material having sufficient finely divided metal particles dispersed therein to reflect light rays, and the composition marketed under the trademark "IRGANOX MD 1024".

The above claim now defines the function of the finely divided metal particles being to reflect light rays. We find the new claims more clearly define the invention. The Examiner has raised serious doubt in our mind whether the invention defined in them might not be obvious from the art cited. In the last analysis, however, we have been persuaded to the contrary by the evidence developed at the Hearing. The invention is not anticipated. It has filled an important need, and there has been considerable commercial success.

We therefore recommend that amended claims 1 to 10 be accepted.

We will now consider the rejection under Rule 52 which is reproduced below:

No amendment to the disclosure shall be permitted that describes matter not shown in the drawings or reasonably to be inferred from the specification as originally filed, and no amendment to the drawings shall be permitted that adds thereto matter not described in the disclosure.

The Rule poses the following question: Under what conditions should the reasonable inference be made and by whom shall it be made? The clear answer to this question is: The man skilled in the art at the time the application was filed. Therefore, in our view, the burden is first imposed upon Applicant to prove that proposed amendments are being made under the specified conditions. The burden of proof then shifts to the Examiner making an objection against entry of an amendment. In order to succeed, he must show by reasoned argument in view of evidence that the "reasoned inference" conditions have not been satisfied.

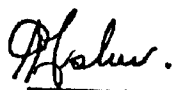
At the Hearing, Mr. Fincham indicated that the amendments proposed by Applicant were typographical errors which were inadvertently left out of the original specification. He indicated that the changes being made were merely to amplify the examples and provide to the public more information as to how they were run. He emphasized that Applicant was not relying on these additional details to substantiate the invention being claimed and as such they were corrections which should be allowed. He then proposed that where one skilled in the art can rectify obvious errors, the specification is not defective and in the case at hand, the changes are not new matter per se. At this point Mr. Helleur indicated that the particular ultraviolet screens indicated in the amendments were supplied with the resin by the manufacturer and were included in the original runs. He also indicated that they were conventional additives and clearly improved the end product.

We now turn to the disclosure as originally filed and find at page 12 line 22 the following statement: "The thus-resulting pellets of a master batch contained a high concentration of metallic powder and other additives". Since it was conventional to load plastics with substantial amounts of fillers such as pigmentation materials, we consider a figure of 30% for metal particles for the purpose of reflecting sunlight would be expected to one skilled in the art at the time the application was filed. Similarly, at page 5 line 20 et seq. we find that Irganox MD-1024 is an additive in amounts within the range .05% to 10% or more. We find the amendment at page 12 line 7 specifying a figure of 0.5% to be well within the comprehension of one skilled in the art since the figure is between the limits specified above. Again, at page 15 line 1 we find that addition of

ultraviolet inhibitors is conventional. The amendment at page 13 specifying a concentration of 0.3% by weight for two particular ultraviolet screen additives is also considered to be within the understanding of one skilled in the art.

In view of the above, we are satisfied that Applicant has fulfilled his obligation respecting proof of reasonable inference considering Rule 52. We therefore recommend that amendments to pages 12 and 13 be entered.

In summary, we find that in our view new claims 1 to 10 overcome prior art objections and disclosure amendments to pages 12 and 13 are acceptable under Rule 52.



G.A. Asher  
Chairman, Patent Appeal Board

I have reviewed the prosecution of this application and concur with the reasoning and findings of the Board. Accordingly, I direct that prosecution should resume on the basis of the recommendations.



J.R.A. Gariépy  
Commissioner of Patents

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Dated at Hull, Quebec

this 16th. day of December, 1981