

DECISION OF THE COMMISSIONER

INDEFINITE CLAIMS: Desired Result; Functiona; Speculative.

While function in terms of result is permissible, the monopoly claimed must not exceed the invention made nor the invention disclosed. Functional statements must not render a claim ambiguous, so as to leave indeterminate the boundaries of the monopoly, or embrace speculative or inoperative areas in which the applicability of the invention is unpredictable. Undue experiment would be required to determine what coatings, if any other than aluminous as disclosed, within the terms of the claims would work.

FINAL ACTION: Affirmed.

IN THE MATTER OF a request for a review by the
Commissioner of Patents of the Examiner's Final
Action under Section 46 of the Patent Rules.

AND

IN THE MATTER OF a patent application serial
number 009,086 filed January 4, 1968 for an
invention entitled:

WRAPPER FOR SMOKABLE TOBACCO PRODUCT

Patent Agent for Applicant: Messrs. Fetherstonhaugh
& Co., Ottawa.

This decision deals with a request for review by the
Commissioner of Patents of the Examiner's Final Action dated
November 5, 1970 refusing to allow claims 1 and 7 (now 6).

Application 009,086 was filed on January 4, 1968 in the
name of E.J. Nleddek and refers to "Wrapper For Smokable Tobacco
Product".

In the prosecution terminated by the Final Action dated
November 5, 1970 the examiner refused claims 1 and 7 on the
following grounds:

- a) indefinite,
- b) too broad in view of the disclosure and
- c) too broad in view of prior art.

The prior art cited was United States Patent 2,976,190,
March 21, 1961, Cl. 131-17 to Meyer.

The Examiner stated:

Claims 1 and 7 are rejected for being indefinite be-
cause there is not enough recitation of features of

the claimed article to give a distinct and explicit meaning to the functional statement present in both claims and relating to the metal coating having a weight:

"not so great as to produce in use a cooling effect by conduction, but having substantially no effect on the porosity or combustibility of the material, said metal coating on combustion yielding an ash which is less permeable by air than the ash of the uncoated material".

Claims 1 and 7, relating to a wrapper material suitable for smokable tobacco products and comprising porous combustible material in sheet form having oxidizable metal coating thereon having a weight of no less than 0.5 micrograms per square millimetre, are further rejected for being too broad in view of the specification; the latter teaching aluminous metal coating of a given thickness as the only coating which would achieve the object of the invention, i.e. reducing the carcinogenicity of tobacco smoke. The term "aluminous metal" being defined on page 3, lines 17-19, as meaning aluminium and alloys of aluminium having substantially the same effect on peak burning temperature as aluminium itself if the same coating thickness.

The passage in the preamble to the specification, page 3, lines 7 to 14, referred to in applicant's letter to indicate that the applicants "did not envisage their invention as being effective only where aluminous metal coatings are used", substantially corresponds to the original claim 1, rejected in the Office Action of February 27, 1969, for being too broad in view of the disclosure in respect of the "metal coating" claimed therein. Consequently, the above passage is not deemed to fully support claims 1 and 7.

Claims 1 and 7 are still further rejected for being too broad in view of the Meyer disclosure of a cigarette paper coated with flocculent aluminium foil. The non-distinct and inexplicit functional statements starting with words "and not so great" up to the end of the respective claim fails to provide a patentable difference over Meyer.

In applicants response of February 5, 1971 he stated:

The Commissioner is requested to review the final action of the Examiners as provided for under Rule 46(2), and take into account the amendments noted above in the claims.

As now amended claim 1 is restricted to include the feature previously appearing in claim 6, namely that the metal coating is a vapour deposited coating. This amendment has been included also in revised claim 6. The prior art, particularly U.S. Patent 2,967,190 Meyer does not disclose the feature of utilizing a vapour deposited metal coating.

With regards to the Examiner's references to the reported cases of Clyde Nail Co. Ltd. v. Russell, 33, R.P.C. 291 and in Re I.G. Farbenindustrie A.G.'s Patents 47 R.P.C. 289, it is respectfully pointed out that these Judgements relate to "selection patents" and the invention of the present application does not fall into this category. It has always been most clearly stated, notably in the case of I.G. Farbenindustrie A.G., referred to by the Examiner, that the special conditions and requirements for a selection patent only apply where the claimed invention is a "selection" from a clear broad prior disclosure. Where no such broad prior disclosure exists, these cases are not relevant and in the present case there is no broad prior disclosure of metal-coated cigarette wrappers. The cited Meyer Patent does not disclose a regular coating of aluminium but the application of previously formed aluminium flakes. Furthermore, the prior British Patent referred to in the present specification, although it discloses a coated wrapper, does not disclose such coatings broadly but only in a thickness up to 20 millionths of an inch, which as already explained is below the lower limit of thickness in the present case. Thus it is quite clear that there is no broad prior disclosure from which the present invention could be said to be "selected" and the Examiner's arguments are therefore beside the point.

Upon review of the grounds set forth by the examiner, as well as all the arguments presented by the applicant I am satisfied that the rejection is well founded based on two counts.

In view of the amendment to the claims the examiner is willing to withdraw the rejection that claims 1 and 7 (now 6) are too broad in view of the prior art. This rejection is withdrawn.

The considerations to be resolved are whether claims 1 and 6 are:

- a) indefinite, and
- b) too broad in view of the disclosure.

I shall first deal with the rejection with respect to Claims 1 and 6 being indefinite in that functional statements are used to indicate the upper limit of thickness by weight of the coating on the wrapper.

What do we mean by the term "functional" as applied to the claims? The term is used in a number of different situations; however, in this situation the upper limit of an important element of the claims is expressed simply in terms of desired result. In other words, the monopoly claimed is anything that will achieve this desired result.

It is well settled that functional claiming in the sense of claiming in terms of a desired result, is per se, permissible under Canadian Patent Law. Nonetheless, a functional claim, like any other claim must not, inter alia, be ambiguous. A claim is usually considered to be ambiguous if a workman skilled in the art cannot determine easily, with only limited experiments, whether what he proposes to do comes within the boundaries of the monopoly claimed. In other words the functional limitations must not be indefinite or couched in such broad terms as to make it almost impossible to determine the scope of the monopoly claimed.

The functional limitations we are concerned with are as follows:

"and not so great (reference to a thickness by weight of the coating) as to produce in use a cooling effect by conduction, but having substantially no effect on the porosity or combustibility of the material".

Here I find the upper limit of the thickness by weight of the coating is set by three functional limitations, that is, limitations as to result:

- a) and not so great as to produce in use a cooling effect by conduction,
- b) but having substantially no effect on the porosity of the material,
- c) but having substantially no effect on the combustibility of the material.

Furthermore the coating would have to be capable of being vapour deposited (claim 1). Also, the metal selected would have to melt and coalesce into a substantially continuous film to form a low porosity sheath, (page 6 of the disclosure), and this sheath (ash) must be less permeable by air than the ash of the uncoated material.

I hold that it would require considerable experimentation to determine what particular coatings would work and this would put undue hardship on any other manufacturer wishing to avoid the terms of the monopoly.

I therefore hold that in this functional respect the claims are indefinite as to the monopoly claimed as they fail to state the thickness by weight of the coating in distinct and explicit terms within the meaning of Section 36 of the Patent Act. Furthermore, I find the thickness by weight limit does not have any meaning with respect to the critical thickness of the coating unless a specified metal is used; this further renders the claims indefinite.

I turn now to the other aspect of the rejection, namely, claims 1 and 6 are too broad in view of the disclosure with respect to the claimed feature of "a metal coating".

I note that applicant has characterized his invention on page 3, lines 7 - 14 of the disclosure in terms which made it clear that he regards his invention as a provision of a particular type of metal coating on the wrapper. From this passage it is clear that the applicant did not envisage his invention as being effective with other than aluminous metal coatings.

I find that claims 1 and 6 are too broad in view of the invention disclosed because they cover unknown and uncharted areas where the applicability of the invention is unpredictable. In the complete specification, there is no indication or teaching that wrappers coated with metals other than aluminous would achieve the object of the invention i.e. raising the peak combustion temperature to reduce the carcinogenicity of tobacco smoke. I find the claims are speculative and attempt to cover a much broader field than that which the applicant has explored. It is well established that there is a limit on applicant's right to claim a generalization from the disclosure. It is also well settled that applicant may not claim a wide class of substances on the basis of a tenuous hypothesis as to their use. Also, it is obvious that the claims cover inoperative embodiments, and finally, applicant is reminded that there are two fundamental limitations on the extent of the monopoly which may be claimed: (a) It must not exceed the invention made. (b) It must not exceed the invention disclosed.

I recommend that the decision of the examiner, to refuse claims 1 and 6 based on the grounds set forth, be upheld.

R. E. Thomas,
Chairman, Patent Appeal Board.

I concur with the findings of the Patent Appeal Board and refuse to allow claims 1 and 6 of this application. The applicant has six months in which to appeal this decision in accordance with Section 44 of the Patent Act.

Decision accordingly.

A. M. Laidlaw,
Commissioner of Patents.

Dated at Ottawa, Ontario,
this 19th day of April, 1971