## DECISION OF THE COMMISSIONER

DIVISION - Rule 60: Textual Infringement Test.

Claims for different representations, shown by prior art to be common place equivalents involving the same problem, fail to meet Rule 60 since the practice of the invention according to the wording of the claims for either representation would not infringe the wording of the claims for the other representation of the invention.

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 031,176 filed September 28, 1968 for an invention entitled:

ACTIVE DELAY EQUALIZER CIRCUIT

## Agent for Applicant

Messrs. Curphey & Erickson, Montreal, Quebec.

This decision deals with a request for review by the Commissioner of Patents of the Examiner's Final Action dated July 23, 1971 on application 031,176. This application was filed in the name of Frederick T. Halsey and refers to "Active Delay Equalizer Circuit".

The Patent Appeal Board conducted a hearing on September 23, 1971. Mr. A.A. Deluca and Mr. J.E. Mowle represented the applicant.

In the prosecution terminated by the Final Action the examiner refused the claims as not satisfying Section 38 of the Patent Act. In this action the examiner stated:

As indicated in the Office Action of March 1, 1971, claim 8 is not a proper Markush claim and is directed to two disassociated embodiments. Claim 8 does not meet the requirements of Section 38 of the Patent Act. Claim 7 is similar in form to claim 8 and is also contrary to Section 38. Claims 7 and 8 are rejected.

The remaining claims do not meet the test imposed by Rule 60 of the Patent Rules and are deemed to be directed to more than one invention. Rule 60 is clear in requiring a claim broader in its scope than any other claim in the application as one criterion for satisfying Section 38. Contrary to the Suggestion of the applicant, the Examiner has not merely selected individual words and phrases within claims 1 and 4 and thereafter concluded because such words and phrases do not appear in the other claim Rule 60 is not satisfied. It was pointed out in the Office Action of June 9, 1970 that "it is readily seen from these and other limitations that claim 1 may be practised without infringing claim 4 and vice versa". Thus a test has been imposed not merely to ensure that the words of one claim appear in the other but to ensure that practise of each claim would invariably result in the practising of one claim which would be considered the broad claim. Such an infringement test is not met, there is no broad claim such as the one mentioned in Rule 60 and Section 38 is not satisfied.

The applicant in his response of August 7, 1971 stated:

It is applicant's contention that the subject matter of claims 1 to 6 inclusive is directed to one invention only and thereby within the ambit of Section 38 of the Canadian Patent Act. Applicant submits that a rejection of said claims as not satisfying Rule 60 is ultra vires to Section 38 of the Act.

As applicant's principal reason for contending that claims 1 to 6 are directed to one invention only is supported by well known network analysis principles relating to the duality of "series" and "parallel" circuits, applicant believes a brief introduction to these principles should help in clarifying the issues surrounding applicant's application.

The subject of duality and the method of converting from one electrical circuit representation to its corresponding dual representation is set forth in the following text book entitled "Electrical Engineering Circuits" by Hugh Hildreth Skilling, Copyright 1957 by John Wiley & Sons Inc. (page 288 et seq.). On page 290 of the above reference an example is shown (Figure 9-18) and the following paragraph is a quotation from this reference text.

"The similarity of form of the equations is evident. In detail, we recognize a duality between elements. In the following list, elements on the same line are the duals of each other:

resistance conductance inductance capacitance voltage current

There is a rule for finding the dual of a network;... and is as follows: On the network diagram, mark a note for the dual network within each loop of the original network, and one more node (to be the reference node) outside all loops of the original network. Through each element of the original network, draw a line; each of these lines is to terminate on the nodes that have just been indicated for the dual network. Each of these lines represent an element of the dual network that is itself the dual of the original element through which the line is drawn. That is, if the line was drawn through capacitance the element of the dual network is inductance; if through a constant-voltage source it is a constant-current source; and so on, according to the above list."

The Examiner has stated that "The design and operation of the two types of generator differ vastly one from the other as shown by the completely different circuit configurations resulting therefrom." Certainly, applicant concurs that two dual circuits utilizing current and voltage sources operate differently from each other. However, having discovered a solution to a problem as illustrated on either of the two circuits it is applicant's opinion that no invention is required in converting any one form to the other.

It is respectfully submitted that applicant has discovered only one basic solution to the problem and that the instant application describes and claims two different embodiments of that solution as the schematic representation and correspondingly the physical representation of a particular circuit may be changed from one representation to another and vice versa with no more skill other than that required to manipulate the necessary equations or follow the established "rules".

As there is only one invention, the presence of both representations in the instant application should be fully in accordance with Section 38 of the Patent Act.

Applicant believes that the difficulty encountered with his application has not stemmed from its inadmissability as being contrary to the Patent Act or to the objects of the Patent System, but to an apparent conflict with Rule 60 as interpreted by the Examiner.

It is respectfully submitted that one must look at the overall concepts as defined by the words and elements in each of the claims to determine whether or not they are equal in scope, rather than the individual words and elements themselves. When this is done it is evident that there is unity of invention and that the two sets of claims define nothing more than two embodiments of a single inventive concept.

After reviewing the grounds for rejection set forth by the examiner as well as the arguments both written and oral set forth by the applicant I am satisfied the rejection is well founded.

At the hearing the Patent Agent reviewed the stand of the applicant and stressed the point that in his opinion all the claims should be allowed in one application.

The consideration to be resolved is whether the claims satisfy the requirements of Section 38 of the Patent Act and Section 60 of the Patent Rules.

In the response of August 10, 1971 the applicant cancelled claims 7 and 8 and raised the following points:

- a) the principle of duality is well known;
- b) a circuit using one type of components is inventive;
- c) to convert from the circuit of b) using the principle of a) is non-inventive;
- d) both configurations are inventive over the prior art and therefore;
- e) the two configurations, being equivalent, are the same invention.

The basic contention is in conclusion e). It is commonly accepted that an applicant may describe and claim more than one embodiment of his invention. Applicant may, however, claim such embodiments in the same application only if there is an allowable broad claim covering the embodiments.

It might well be that there are situations in which argument could be presented to show that one embodiment of an invention is non-inventive in view of another and there should be no need for a broad claim to satisfy Section 60 of the Patent Rules. However, this Section requires one claim broader in scope than any other claim in the application.

It is noted that a particular fluid amplifier obeys a certain equation and by following a given rule electrical equivalents may be designed and built without further invention.

While the two are mathematically equivalent, they are not structurally equivalent or equivalent in the use to which the claims are directed. It is also noted that a manufacture adhering to the wording of either group of claims would not infringe the wording of the other group of claims.

I find that the claims do not meet Section 60 of the Patent Rules and shall therefore be deemed to be directed to more than one invention since it is clear that Section 60 of the Patent Rules requires a claim broader in scope than any other claim in the application as a criterion for satisfying Section 38 of the Patent Act.

I find the claims do not meet such criterion and shall be deemed to be directed to more than one invention. In the circumstance, I recommend that the decision of the examiner, to refuse the claims as not satisfying Section 38 of the Patent Act, be upheld.

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

I concur with the findings of the Patent Appeal Board and refuse to grant a patent on the claims as presently presented. 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, Ont., this 14th day of October, 1971.