

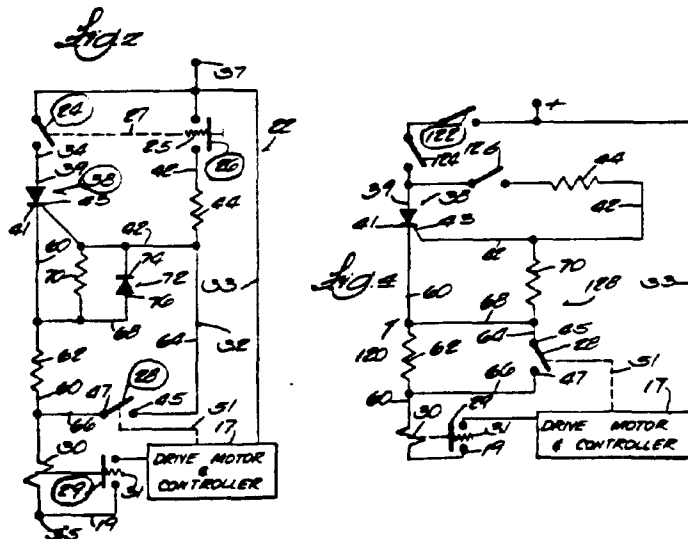
COMMISSIONER'S DECISION

CLAIMS INDEFINITE AND INCOMPLETE: The terms used in two claims were found definite and complete in view of the specification and drawings and affidavit evidence. Rejection withdrawn.

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This decision deals with Applicant's request for review by the Commissioner of the Final Action on application 313,125 (Class 342-19.5) assigned to Outboard Marine Corp. entitled THYRISTOR INTERLOCK AND INDICATOR LIGHT CIRCUIT FOR ELECTRIC VEHICLES. The inventors are D.T. Cavil and G.N. McAuliffe. The Examiner in charge issued a Final Action on August 11, 1982 refusing to allow the application.

This application relates to circuitry used in DC motor powered vehicles having a seat actuated switch, such as a golf buggy. Should an operator leave the seat, the motor is de-energized and the vehicle stops. Circuitry achieving this result is shown in figures 2 and 4 reproduced below.



The application says a seat operated switch may be placed in circuit 22 of figure 2 between battery terminal 37 and switch 24, similar to the placement of seat switch 122 in figure 4. In figure 2, when the seat switch and switches 24 and 26 are closed current flows to the thyristor 38, via switch 24 to anode 39 and through switch 26 and a resistor 44 to gate 43. Current also flows through resistors 70 and 62, but due to the three resistors's

not sufficient to actuate coil 30 of switch 29 and connect the motor to the other terminal 35. After a period of time the current activates or gates the thyristor. Then, closing switch 28 shorts out resistor 62 and permits the now stronger current from the thyristor to flow to and actuate switch 29, energizing the motor. When a person leaves the seat, the seat switch opens and the vehicle stops. To restart, the seat switch has to be closed and switch 28 opened to permit the thyristor to be gated again, after which closing switch 28 passes the current to switch 29 and the motor becomes operative. The operation of figure 4 closely follows that of figure 2 except that restarting is not possible when the vehicle stops in reverse drive; changing to neutral or forward mode is required before the restarting procedure may be carried out.

The Examiner rejects claims 13 and 14 in the Final Action for being inter alia, indefinite, incomplete and for reading on inoperable embodiments. He reasons (in part) as follows:

...

Since each "coil", and "thyristor", and "switch", and "subcircuit" has at least 2, or 3, or more terminals, the possible different combinations of connecting them together are fairly large. Out of this large number of combinations or permutations, only the two or three disclosed ones (see Figs. 2-4) are demonstrated as being operable for the purposes intended.

...

For example, having a "subcircuit" of an undefined structure connected "in circuit with" a thyristor having at least three terminals reads on practically any thyristor connected in any which way to practically anything.

...

In presenting his case for allowance of the claims, Applicant refers to his letter prior to the Final Action, wherein he submitted claim 13 in which he added a reference numeral behind each element to show they are present in the specification. He comments on the case, Monsanto Co. v Commissioner of Patents 1969, 2 S.C.R. 1108 and he believes it is not necessary to describe

in the disclosure all possible embodiments covered by the claims. To support his view he quotes from Burton Parsons v Hewlett Packard 1974, 17 C.P.R.(2d) 97 at 106-7:

If it is possible for the patentee to make a sound prediction and to frame a claim which does not go beyond the limits within which the prediction remains sound, then he is entitled to do so.

He argues a patent specification is addressed to persons skilled in the art, and must enable such persons because of their skill to prepare substances or arrangements claimed and to avoid those things which would not be useful. He recognizes the court cases he relies on are concerned with chemical rather than electrical matters, however, he submits the points of law in the cases extend to the field of art of his application.

The issue before the Board is whether or not claims 13 and 14 are definite and complete. We reproduce claim 13 containing the identifying reference numerals submitted by Applicant:

A thyristor interlock circuit (22) for energizing a DC motor (18) which circuit comprises a solenoid switch (29) including an actuating coil (30), means (19,33) for connecting said solenoid switch (20) and the motor (18) in series relation between the terminals (35,37) of a DC source, a thyristor (38) having an anode (39), a cathode (41), and a gate (43), means (34,24) for connecting said anode (39), to one terminal (37) of the DC source, a first switch (26), means (42,44) for connecting said first switch (26) to the one terminal (37) of the DC source and to said gate (43), a second switch (28) including two terminals (45,47), and sub-circuit means (32) connected in circuit with said thyristor (38) and said actuating coil (30) and said first (26) and second (28) switches for forcing an operator to sequentially close said first (26) and second (28) switches in order to energize the DC motor (18).

Significantly, in his Final Action, the Examiner recognizes Applicant's arguments that claims 13 and 14 are identifiable, by saying (in part):

...

...the rejected claims read not only on the embodiments described in the drawings, but also on a large number of other embodiments which result from the various permutations of the above terminal connections amongst each other.

...

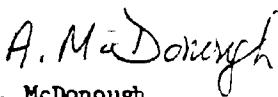
(2) Applicant has further argued that his claims do read on the drawings.


This is true. However, the claims read also on a great many other embodiments, with no demonstrated operability or usefulness, as set forth above.

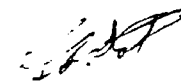
...

We agree with both the Applicant and the Examiner that claim 13 is understandable when viewed in conjunction with the drawings, particularly figure 2. We accept the Applicant's understanding of the reasoning developed in Burton Parsons supra. We believe the comments therein concerning the person skilled in the art are intended to be interpreted broadly to include such a person in whatever art is being considered. Here the Applicant submitted an affidavit by D.H. Wood in which Mr. Wood sets out his background in electrical engineering and says he would have no difficulty in predicting which connections to make from the specification and drawings of the application. Further we have no difficulty in relating the numerically identified elements of claim 13 submitted by Applicant with the components shown in figure 2. Applicant says the same identification of terms in claim 14 may be made. We find the terms in both these claims are properly identified in view of the specification and drawings. We have no doubts that Applicant has complied with the requirements of Section 36 sub-sections 1 and 2. In our opinion, claims 13 and 14 are definite, complete and acceptable in view of the Monsanto and Hewlett-Packard court cases. No art was cited and we make no ruling on patentability.


Having found the claims to be acceptable, we believe a Hearing would be unnecessary. We recommend that the rejection for being indefinite and incomplete be withdrawn, and the application returned to the Examiner for prosecution consistent with our findings.

  
A. McDonough  
Chairman  
Patent Appeal Board

  
M.G. Brown  
Assistant Chairman

  
S.D. Kot  
Member

I concur with the findings and the recommendation of the Patent Appeal Board. Accordingly I withdraw the Final Action and remand the application for prosecution consistent with the recommendation.

  
J.H.A. Gariépy  
Commissioner of Patents

Agent for Applicant

Smart & Biggar  
Box 2999, Station D,  
Ottawa, Ont.

Dated at Hull, Quebec  
this 6th. day of May, 1985