IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application 2,002,575 having been rejected under Rule 47(2) of the Patent Rules, the Applicant asked that the Final Action of the Examiner be reviewed. The rejection has consequently been considered by the Patent Appeal Board and by the Commissioner of Patents. The findings of the Board and the ruling of the Commissioner are as follows:

Applicant

John Bruce McBurney 6665 McLeod Road Niagara Falls, Ontario L2G 3G3 This decision deals with the Applicant's request for a review by the Commissioner of Patents of the Examiner's Final Action dated April 24, 1992, on application 2,002,575 (Class 123-114), filed on November 9, 1990 and entitled "Methane Methanol Generating System for Internal Combustion Engines". The inventor is John Bruce McBurney who has prepared, filed and prosecuted his own application without the assistance of a registered patent agent. A hearing before the Patent Appeal Board, composed of Mr. Frank Adams, Chair and Mr. Murray Wilson, Member, was held on September 30, 1992. Mr. McBurney appeared at the hearing.

The application relates to a carburation process for an internal combustion engine and apparatus for carrying out the process. According to the applicant, gasoline and water are heated to form gasoline vapour and steam. They are mixed together and the mixture is then passed over a catalyst where it is converted into low molecular weight hydrocarbons, methane and methanols. This material is then drawn into the engine cylinders where it burns.

Figure 1 of the application shows an elevation, partly in section of one embodiment of the applicant's device.



Droplets of gasoline are injected into a mixer block 2 by injector 1. In the mixer block, the droplets are mixed with steam which is produced in coil 3 which is heated by the engine exhaust gases. The mixture then passes through coils 8 where it is heated to become a mixture of steam and gasoline vapour. The hot mixture passes through catalyst bed 9 and exits at 10 to be mixed with air for combustion. The catalyst bed contains a fine metal catalyst and the bed can be easily removed from the device in order that the catalyst can be regenerated or replaced.

The Examiner issued a Final Action on April 24, 1992 refusing the application under Section 27(1)(d) of the Patent Act on the ground the applicant had made the invention available to the public more than one year prior to the filing of the application.

On December 4, 1989, Mr. McBurney paid the request for examination fee, filed a request for special order and submitted to the Patent Office a copy of a publication entitled "The Secret High Mileage Answer - Some interesting discoveries on how they worked and how we can make them work for tomorrow". The author is listed as John Bruce McBurney and it contains a copyright notice indicating that it was published in 1987. It is also identified by ISBN number 9693280-0-1. This booklet describes the work undertaken by Mr. McBurney in his attempts to develop a process which would allow internal combustion engines used in cars to achieve extremely high gas mileage, in the order of 320 kilometres (200 miles) per gallon. On pages 58 and 59, he gives details of his system. A portion of that text is as follows:

> "This system will change the molecular structure of a hydrocarbon, and water into a finer compound state, methane or natural gas and carbon monoxide. Using a iron particle catalyst cartridge, vaporous gasoline and steam will regulated into the cartridge then flowed into a further heated coil to allow time for the hydrocarbon to crack into the finest state, Natural Gas and Carbon Monoxide. This will align and lower the boiling point of the fuel for greater efficiency.....

The gasoline and water feed lines will be preheated by coiling them around the exhaust pipe and insulating with foil and fiberglass. The gasoline will be controlled by fuel injection into a vaporizing coil maintaining a temperature 350 degrees C to maintain complete vaporous state.... The main structure is cylindrical with centre area access for catalyst cartridge replacement. The cartridge cylinder is directly exposed to electric elements and heated surface of exhaust gases. It will be filled with a catalyst material, a metal as steel, iron. Experimentation will produce a better catalyst. It will have two fittings one for input and one for output and will be baffled inside to allow greatest surface use and time exposure. The output of the system will be connected to a cooling coil then regulator for flow to engine....

When the steam and gasoline vapour enter the iron chamber the water is broken down, the oxygen forms with the carbon, the hydrogen forms with hydro-carbon, cracking it into the finer form, natural gas and carbon monoxide.

The claims of the application read as follows:

1. The vaporization of gasoline droplets by waste heat from the exhaust gases of an engine to increase the efficiency with which chemical energy stored in gasoline is converted into propulsion power.

2. The catalytic conversion of a mixture of water and gasoline vapour to small molecular weight hydro carbons, methane and methanol.

3. The combustion in the internal combustion engine of a mixture of air, small molecular weight hydrocarbons, methane and methanol to produce less pollution of the atmospheric environment.

4. A process for generating methane and methanol for use in an internal combustion engine generated from gasoline and water by passing them over a catalyst heated by exhaust gases.

5. A pre carburation system consisting series of tubings and catalyst bed heated by exhaust gases to regain this heat energy into further cracking of a liquid hydrocarbon and water into lighter more aromatic hydro carbon and methanol. The Board is left to consider two questions; 1. does Mr McBurney's booklet describe the same alleged invention as he discloses and claims in the instant patent application? and 2. if the answer to question 1 is yes, does that booklet constitute a statutory bar to the grant of a patent under Section 27(1)(d) of the Patent Act?

With respect to the first question, the Board is of the opinion that the booklet and the patent application are directed to the same subject matter. The booklet, while being primarily a diary of events, includes text which clearly describes a system in which gasoline vapour and steam are passed over iron particles. At the hearing Mr. McBurney explained that the iron acts as a catalyst to cause the gasoline to crack in the presence of the steam to form a new and more efficient fuel.

Concerning the second question, the Board agrees with the Examiner that the actions taken by Mr. McBurney with respect to the distribution of the booklet made the process and the device which he claims as his invention available to the public more than one year before this application was filed. The booklet contains two copyright notices, each of which indicates that it was published in 1987. On page 60, Mr. McBurney states that on November 10, 1987 he had had 100 copies of the book printed and that 97 of them had been distributed "to the local newspapers, book stores, auto parts stores David Horrowitz, Ralph Nader, N.R.C., The Enquirer Newspapers, Mechanics Illustrated, Publishers, consumers groups and to some of my friends".

The entries in the booklet continue until December 3, 1987. This raises the issue of how could a book describe its own publication and distribution. At the hearing, Mr. McBurney explained this apparent contradiction. The original publication had taken place in 1987 and had contained all of the material up to page 59. The copy that he had submitted to the Patent Office was a later edition to which he had added pages 61 to 63 containing the references to printing and distribution of the earlier edition.

Section 27(1)(d) of the Patent Act states:

Subject to this section, any inventor or legal representative of an inventor may, on presentation of a petition setting out the facts and on compliance with all other requirements of this Act, obtain a patent granting to the applicant an exclusive property in the invention unless (d) the invention was, more than one year before the date of filing of the application disclosed by the applicant or by a person who obtained knowledge of the invention, directly or indirectly, from the applicant, in such a manner that it became available to the public in Canada or elsewhere.

Because the applicant made the information which he claims as his invention available to the public more than one year before he filed his patent application in the Patent Office, Section 27(1)(d) of the Patent Act precludes him from obtaining a patent.

In summary, the Board recommends that the rejection of the examiner be upheld and that the grant of patent from the instant application be refused.

F.H. Adams Chairman Patent Appeal Board

M. Wilso

Member Patent Appeal Board

I concur with the findings and the recommendation of the Patent Appeal Board. Accordingly, I refuse to grant a patent on this application. Under Section 41 of the Patent Act, the Applicant has six months within which to appeal my decision to the Federal Court of Canada.

ilh

M. Leesti Commissioner of Patents

dated at Hull, Quebec this 4th day of November 1992

Applicant

John Bruce McBurney