

## COMMISSIONER'S DECISION

Sec. 2: Process to brush teeth: Lanthanum Cation for Cleaning Teeth

A method of brushing teeth does not produce an essentially economic result within the meaning acceptable in patent law. Also, the method of treating teeth was considered the equivalent of a method of medical treatment which may be applied by persons not in the field of medicine. Rejection affirmed.

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This decision deals with Applicant's request for review by the Commissioner of Patents of the Examiner's Final Action on application 304,853 (Class 167-318). The application was filed on June 6, 1978, by Imperial Chemical Industries Ltd., and is entitled LANTHANUM CATION FOR CLEANING TEETH. The inventors are Gunnar Rolla and M.R.C. Winter. The Examiner in charge issued a Final Action on May 20, 1981, refusing the application. In reviewing the application, the Patent Appeal Board held a Hearing on April 24, 1982, at which the Applicant was represented by Mr. D. Morrow, the Patent Agent.

The application discloses and claims a new dental cleaning composition, and also claims the process where individuals use that composition to brush their teeth. The dentifrice contains lanthanum as a cation form of a salt, and is said to be particularly effective in removing plaque and tobacco stains from an individual's teeth.

In the Final Action, claims 1 and 2, the process claims, were refused by the Examiner as defining non-patentable subject matter and as being beyond the scope of Section 2 of the Patent Act. No objection was taken against composition claims 3-5.

In the Final Action the Examiner stated (in part):

...

### Applicant's Arguments

(1) Since there has been no rejection of the composition claimed under Section 2 and Section 41, the method claimed should be considered as a method of use of the said composition.

(2) With respect to people that do not suffer from caries, such claimed method cannot be regarded as a medical treatment (see amendment letter page 5 lines 21-23, page 6 lines 13-14 and page 7 lines 9-11).

Applicant's arguments are rejected. Regardless of the composition being within or beyond Sections 2 and 41 and that the method is the method of use of the said composition, it remains that method claims 1 and 2 for cleaning dental plaque is a medical treatment. On page 5 line 10 of the amendment letter, it is stated it has "beneficial effect in the prevention of dental caries and peridental disease".

With respect to applicant's second argument, if a method treats one person's caries, that method is a method of medical treatment.

With respect to the patentability of medical treatment reference is made to the decision of the Supreme Court of Canada, in the case of Tennessee Eastman Co. v. the Commissioner of Patents (C.P.R. 8, 2nd series, 202). In his decision Pigeon, J. declared that methods of medical treatment are beyond the scope of Section 2 of the Patent Act. Treatment of humans does not produce a result related to trade or commerce and the grant of a monopoly of a medical treatment method would circumvent the restrictions of Section 41 of the scope of Section 2. In other words food and medical agents if made by chemical processes may only be claimed in process-dependent form. If however methods of feeding or medical treatment (method of use) were made allowable, these claims would create a fence around the same agent independent of the novel process by which they were manufactured. It follows that medical treatment was never contemplated to be within the scope of the term "invention" and Section 2 of the Patent Act. It may further be noted that it is a matter of common sense that everyone should have the common law right to feed, and clean himself and be treated if ill without any legal impediment.

Therefore, claims 1 and 2 are rejected for being unpatentable under Section 2 of the Patent Act.

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In responding to the Final Action, the Applicant made his case (in part) as follows:

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A. A method of medical treatment is not, per se, unpatentable

The starting point must of course be the decision of the Supreme Court of Canada in the case of Tennessee Eastman Co. v. The Commissioner (1973), 8 CPR (2d) 202. The Examiner cites that case for the proposition that "methods of medical treatment are beyond the scope of Section 2 of the Patent Act". If the case in fact supports that proposition, and if the claims are for methods of medical treatment (which we do not accept) it would follow that claims 1 and 2 must be rejected. However, in our submission, the case does not support the proposition for which it is cited by the Examiner.

The reasons stated by Pigeon, J. must be carefully examined. At page 206, he defines the issue in the case as follows:

"The sole question is therefore whether a new use for surgical purposes of a known substance can be claimed as an invention".

Pigeon, J. then examines the words "art" and "process" in the definition of "invention". He does not conclude that those words, per se, exclude medical methods of treatment. This is not surprising; the words "art" and "process", taken by themselves, are very broad, and do not inherently exclude any particular types of arts or processes. Further, Pigeon, J. does not find that medical methods of treatment are excluded from the definition of the "invention" by subsection 28(3) of the Act. It is only by reference to subsection 41(1) of the Act that Pigeon, J. comes to his conclusion. He reasons that an inventor should not be able to claim, by patenting a method, a monopoly that he could not otherwise claim in the substance itself, under subsection 41(1). Thus, since 41(1) precludes a monopoly in a substance "prepared or produced by chemical processes and intended for food or medicine" except when prepared or produced by a particular process, a patentee should not obtain, in effect, a monopoly to the same thing by claiming its method of use, irrespective of process of manufacture. But that is all the decision stands for. The only fact situation that was being considered by Pigeon, J. was the fact situation where subsection 41(1) is applicable to the product used in the method.

In the present case, subsection 41(1) is inapplicable to the claimed substances. Therefore, a patent for the method of use of the substances involved in the present case is not an extension of monopoly of the type considered by Pigeon, J. Thus, the decision of the Supreme Court is not binding on the Commissioner in the present case, and the Commissioner is free to decide the matter from first principles.

To consider the matter from first principles requires an examination of the words "art" and "process" in section 2, unfettered by any consideration of subsection 41(1). Taken by themselves, these words are broad indeed. There is no Canadian decision that specifically excludes their application to a method of medical treatment. The definition of "invention" in the Canadian Act is essentially the same as that in the United States Act. The only difference is that the United States Act formerly used the word "art" and now uses the word "process". However, those terms have been treated as equivalent. In the recent decision of the Supreme Court of the United States in Diamond v. Diehr, (copy enclosed) a decision rendered on March 2, 1981, the meaning of the word "process" in the United States Act was discussed. The Court adopted its own previous decisions, defining a process as:

"a mode of treatment of certain materials to produce a given result. It is an act, or series of acts performed upon the subject matter to be transformed or reduced to a different state or thing. If new and useful, it is just as patentable as is a piece of machinery. In the language of the Patent Law, it is an art".

The Court holds that excluded from patent protection are laws of nature, physical phenomena, and abstract ideas. The Court does not exclude medical methods of treatment, and indeed, such have never been excluded under United States Law (see, e.g., Ex Parte Scherer 103 U.S.P.Q. 107).

In New Zealand, where the definition of "invention" is essentially the same as the United Kingdom definition, i.e. "manner of new manufacture", it has been held in Wellcome Foundation Limited v. The Commissioner, [1980] R.P.C. 305 that a method of medical treatment comes within that definition. It seems obvious that the definition "manner of new manufacturer" is inherently no broader than, and probably inherently more restrictive than, the words "art" or "process". Nevertheless, the New Zealand Court was unable to find any inherent restriction in those words that excluded a method of medical treatment. It is therefore submitted that, in the absence of any authority requiring the exclusion of the method of the present claims from patentability under the Canadian Patent Act, it should be concluded that methods of medical treatment that do not relate to the use of substances covered by subsection 41(1) of the Patent Act are patentable, and the present claims should therefore be allowed.

B. In any event, the subject matter claimed here is not a method of medical treatment

In the alternative, if the Commissioner holds that medical methods of treatment generally are per se unpatentable, not merely those that relate to the use of products covered by subsection 41(1), we nevertheless submit that what is being claimed here is not, in substance, a method of medical treatment. The issue here becomes one of characterization. What is being claimed is a method of removing plaque and stains from teeth. Most people are unaware that the presence of plaque on teeth has anything to do with the formation of caries. However, the media constantly drum into everyone the notion that the presence of plaque and other foreign materials on teeth is socially undesirable. Thus, the primary motivation for the removal of such materials from teeth is social and cosmetic, not medical. The fact that there may be an incidental (and usually unintended) medical benefit should not render the subject matter of these claims, in substance, a method of medical treatment. On the contrary, we submit that, in substance, the claims cover cosmetic methods of approving the appearance and texture of teeth.

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The issue before the Board is whether or not brushing teeth with a composition containing a lanthanum cation releasing material is directed to a process which is patentable. Claim 1 reads:

A method of cleaning dental plaque or stains, including tobacco stains, from human teeth by applying thereto to an aqueous composition which consists of an unbound lanthanum cation in the form of a dissolved water-soluble salt in such a concentration that in individual dose contains from 0.01 m mole to 1 m mole of the cation, said composition being substantially free from any ingredients which precipitate the lanthanum cation as a water-insoluble salt, being designed for direct application to the teeth and being in a form for use in a non-sequential manner.

While the Agent has argued that no medical treatment is involved in the method claims, the Examiner has stated that one of the benefits contemplated by the process is the prevention of plaque on teeth, and thus removal of the environment in which bacteria may gather and contribute to the development of caries. The Examiner contended that this benefit puts the method into the realm of a medical treatment. In arguing Applicant's position that no medical treatment was represented by the method claims the Agent referred to several court cases, among them, in re Oral Health Application (1977) R.P.C. 612, in which a process for cleaning teeth was refused. The Agent stressed that the decision in that court case was that of a lower court in Britain, and urged that the effect of two Supreme Court Decisions in Canada, namely Tennessee Eastman v The Commissioner (1973) 8 C.P.R. (2d) 202, and Burton Parsons v Hewlett-Packard (1975) 17 C.P.R. (2d) 97, should prevail.

From the application we find that the purpose of Applicant's process is to clean teeth by removing plaque and stains by the action of lanthanum in cation form, and by so removing the plaque remove the potential breeding spot for bacteria. Because Applicant's process is directed towards cleaning or treating part of the human body, i.e. the teeth, we are of the view that the process is a treatment of the human body. We believe that Applicant's application is directed to subject matter which is similar to that adjudicated in the Tennessee Eastman decision, supra.

In reviewing the application and the prosecution we find it relevant to the kind of method of treatment of teeth being considered here, to refer to certain passages in the Tennessee Eastman decision (62 C.P.R. 117), first at page 130 where Mr. Justice Kerr stated:

Early in the development of patent law in England it was accepted that a manner of new manufacture may be a product or may be a process that can be used in making something that is, or may be, of commercial value, a vendible product. Concurrent with that concept was the principle that a method of treating any part of the human body does not afford subject matter for a patent... (underlining added).

and again at p. 135:

...in Maeder v "Ronda" Ladies Hairdressing Salon and Others (1943) N.Z.L.R. 122, Myers C.J., and Johnston J. ...held that a process, to be patentable, must at least have relation in some way to the production of an article of commerce.

It is our view that teeth which have been treated with Applicant's composition are not articles of commerce, nor are the people whose teeth have been so treated.

One of the purposes of Applicant's invention is stated on page 3 of his application as follows: "...the method of the invention will result in the additional benefit of a reduction in the incidence of caries and/or periodontal disease."

In view of the purpose of the method, namely to treat part of the human body, we again find guidance in Tennessee Eastman (62 C.P.R.) at page 154:

In my view the method here does not lay in the field of the manual or productive acts nor, when applied to the human body, does it produce a result in relation to trade, commerce or industry, or a result that is essentially economic. The adhesive itself may enter into commerce, and the patent for the process, if granted, may also be sold and its use licensed for financial considerations, but it does not follow that the method and its result are related to commerce or are essentially economic in the sense that those expressions have been used in patent case judgements: The method lies essentially in the professional field of surgery and medical treatment of the human body, even although it may be applied by persons not in that field. Consequently, it is my conclusion that in the present state of the patent law of Canada and the scope of subject matter for patent, as indicated by authoritative judgements that I have cited, the method is not an art or process or the improvement of an art or process within the meaning of s. 2(d) of the Patent Act.

We note that the above passage appears in the Supreme Court decision which affirmed the position of the Patent Office, as found in 8 C.P.R. (2d) 202 at 204. Of further significance to the method of this application, is the reliance by Mr. Justice Kerr, in Tennessee Eastman at page 134, upon Maeder v Busch (1938) 59 C.L.R., as per the following statement:

But the object (of the invention) is not to produce or aid the production of any article of commerce. No substance or thing forming a possible subject of commerce or a contribution to the productive arts is to be brought into existence by means of or with the aid of the process.

We are led by the Tennessee Eastman decision to the view that Applicant's method is not related to, nor does it produce, "...a result that is essentially economic" within the meaning which is acceptable in patent law. We find therefore that the method claims are directed to a treatment of part of the human body, and is equivalent to a method of medical treatment which may be applied by persons not in the field of medicine. Furthermore, the method does not contribute to the productive arts. What individuals do to their own teeth as they stand before a mirror in their bathrooms is not a process in the economic sense which the Patent Act was created to protect.

We recommend that the rejection of method claims 1 and 2 be affirmed.



G.A. Asher  
Chairman,  
Patent Appeal Board, Canada



M.G. Brown  
Member

I concur with the reasoning and findings of the Patent Appeal Board. Accordingly, I refuse to grant a patent containing claims 1 and 2. If any appeal under Section 44 of the Patent Act is contemplated, it must be taken within six months of this decision. If the refused claims are removed within the above time period, the application is to be remanded to the Examiner to resume prosecution in accordance with this decision.



J.H.A. Gariépy  
Commissioner of Patents

Agent for Applicant

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Dated at Hull, Quebec

this 10th. day of August, 1982