

## COMMISSIONER'S DECISION

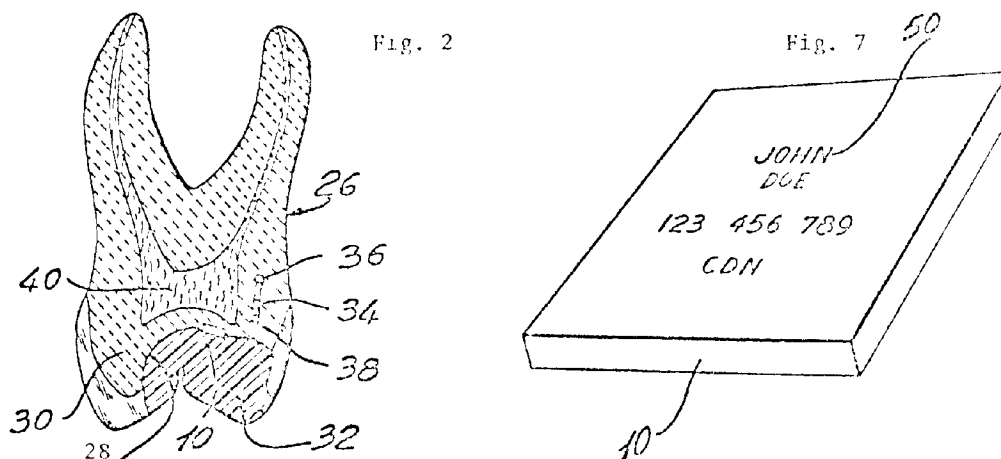
### Section 2- Dental Identification of Human Remains

A labelled ceramic chip is placed in the teeth of or bones of the human body so it may be identified after air crashes or other disasters. The method of insertion was held to be beyond the scope of Section 2  
Rejection Affirmed.

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Patent application 223,202 (Class 83-30), was filed on March 25, 1975, for an invention entitled "Positive Identification Method And Structure ". The inventor is Philip L. Samis. The Examiner in charge of the application took a Final Action on September 22, 1978, refusing to allow it to proceed to patent. In reviewing the rejection, the Patent Appeal Board held a Hearing on February 13, 1980, at which the Applicant was represented by Mr. R. Mitchell. Dr. Samis was also present.

The subject matter of this application is a system of identifying human beings and animals. A miniature information carrier, such as a ceramic chip, is buried in a hard portion of the body, such as a tooth. If the individual is killed in an airline crash, for example, his body may be identified by the chip. Figures 2 and 7 reproduced below are representative of what is involved.



The plaque 10 is shown embedded in the tooth. The purpose of pin 34 is to assist in detecting the location of the plaque by radiographic procedures.

In the Final Action the Examiner rejected claims 1 to 15 as directed to "subject matter outside of the scope of Section 2 of the Patent Act."

Claims 1 to 15 relate to the method of implanting the plaque in a "highly mineralized portion of the body." Claims 16 to 26 directed to the carrier or plaque were said in the Final Action to be allowable.

In response to the Final Action the Applicant quoted numerous court decisions, and stated (in part):

...

... The step of drilling a hole in the enamel of a tooth when there is no decay in the immediate area of the drill hole or in the area prior to the drilling of the hole does not result in the treatment of that tooth. If the tooth is not diseased, then how can it be said that the drilling of a hole..., the placing of a tag..., and the capping of that hole is a treatment of that tooth. The person drilling the hole in the tooth is not exercising judgment in a professional manner to treat or cure the tooth, but merely as a means to an end, that end being the identification of the body.

Applicant insists that he is not by his method treating the human body or carrying out surgery in the medicinal sense. The method including the step of drilling a hole in a tooth meets the definition of "art" or "operation" defined in Lawson v. Commissioner of Patents.

...

The results of the method are not improved by one's professional skills in carrying out the step. The hole in the tooth can be drilled by a dentist or by anyone capable of handling a dental drill. It is also contemplated, although not described in the present application, that a small jig could be provided for consistently carrying out the step of drilling the hole in the tooth

...

It is believed that it is settled in Canada that in order for a process or method to be excluded from patent protection under Section 2(d), it must be to a medicine or surgery in the strict sense. That strict sense is in the sense of treatment for curing diseases.

The cases certainly do not support the Examiner's contention that "Drilling a hole is an operation, and when one of the starting materials is a living body the operation is of a surgical nature "

Certainly, the terms "medicine" and "surgery" must be, under Canadian practice, interpreted in the strict sense and not in the broader sense which the Examiner attempts.

In summary, since the method claimed is one for the purpose of identification and not for the purpose of treatment of disease, applicant submits that he is entitled to a patent under Section 2(d) of the Act for the process of claims 1 to 15.

Claim 1 of this application reads:

A method for providing positive identification of a living body comprising:

- (a) providing a hard, highly mineralized portion of the body with a cavity,
- (b) placing identifying intelligence on a radiographically detectable carrier,
- (c) embedding the carrier in the cavity whereby the carrier is completely within the mineralized portion of the body such as to lend a high degree of heat and impact protection to the carrier.

The question before the Board is whether or not the subject matter of the rejected claims is outside the scope of Section 2 of the Patent Act.

There was considerable controversy about the term "surgery" as used in the application. In the Final Action it was stated that "...the Examiner is unable to follow the Applicant's reasoning which is directed to some point concerning medicine. While surgery might be broadly considered to be a part of what is sometimes referred to colloquially as the practice of medicine, this appears rather irrelevant to the rejection of the claims which is, and always has been, that their subject matter claims the treatment of a living body by surgery. Drilling a hole is an operation, and when one of the starting materials is a living body the operation is of a surgical nature..."

On the other hand Mr. Mitchell argues that "...The word surgery, according to Webster's Third New International Dictionary, is a branch of medicine that is concerned with diseases and conditions requiring or amenable to operative or manual procedures. It is clear that the drilling step or provision of a cavity in a living being's tooth in the method claimed in the present application is not a surgical step. If medicine refers to the fine art of

treating diseases, then surgery is one of those fine arts within the broad definition of medicine and is considered for the full purpose of treating diseases. The step of drilling a hole in the enamel of a tooth when there is no decay in the immediate area of the drill hole or in the area prior to the drilling of the hole does not result in the treatment of that tooth...."

Further, Applicant maintains that the step of drilling a hole in a tooth meets the definition of "art" as defined in Lawson v Commissioner of Patents, 1970, 62 C.P.R. 101. Turning to that decision at page 109 "art" or "manufacture" are defined as:

An art or operation is an act or series of acts performed by some physical agent upon some physical object and producing in such object some change either of character or of condition. It is abstract in that it is capable of contemplation of the mind. It is concrete in that it consists in the application of physical agents to physical objects and is then apparent to the senses in connection with some tangible object or instrument.

In Tennessee Eastman vs the Commissioner of Patents (1970) 62 C.P.R. 117 and 1974 S.C.R. 111, after deciding "the application is concerned with a process of medical or surgical treatment of living tissues in living bodies including humans," the Exchequer Court said at 155 (quoted by the S.C. at 114):

The method lies essentially in the professional field of surgery and medical treatment of the human body, even although it may be applied at times 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 within the meaning of s.2(d) of the Patent Act.

At the Hearing Dr. Samis, the inventor, stated that the identifying tag did not necessarily require a dentist to implant it in a tooth. He indicated that any person capable of handling a dental drill could be taught the necessary technique in a short period of time.

In response to the question as to whether or not the application relates to a "manner of manufacture" Mr. Mitchell agreed that it did not result in a vendible product. However, he maintains that it is a method which results in a commercial benefit similar to the situation covered by the N.R.D.C. application as reported in R.P.C. (1961) @134. Further in support of his position Mr. Mitchell recited a claim from a recently allowed Canadian patent which relates to certain methods of testing which require the step of performing a "thoracic duct fistula" on a patient.

We are aware that there are dental procedures in which "posts" are tapped into the existing tooth root as a base for building the tooth up by acrylic or other such material. Thus an article is "embedded" in a tooth by a method similar to that proposed by the Applicant. However since we are only concerned with Section 2 of the Patent Act we will not comment further on this point.

Having studied the relevant decisions of the Canadian Courts, and in particular Tennessee Eastman (supra) Imperial Industries v Commissioner of Patents 51 S.P.R. (1967), Lawson v Commissioner of Patents (supra) and the jurisprudence relied upon in them, we believe that the process claimed is unpatentable under Section 2 of the Patent Act.

In the Lawson decision (supra) at p. 109, it was stated that:

I take it as well settled that all new and useful arts and manufactures are not necessarily included in s. 2(d) of the Act.

The Court also quoted with approval the following passage from National Research Development Corporations application (Australia) [1961] R.P.C. 135,  
Dixon C.J. at p. 145:

The point is that a process, to fall within the limits of patentability which the context of the Statute of Monopolies has supplied, must be one that offers some advantage which is material, in the sense that the process belongs to a useful art as distinct from a fine art (see Virginia-Carolina Chemical Corporation's Application, [1958] R.P.C. 35 at p.36) - that its value to the country is in the field of economic endeavour. (The exclusion of methods of surgery and other processes for treating the human body may well lie outside the concept of invention because the whole subject is conceived as essentially non-economic: see Maeder v. Busch (1938), 59 C.L.R. 684 at p. 706.)

From that the Court concluded:

It is obvious from the concluding portion of the above quotation that professional skills are not the subject-matter of a patent. If a surgeon were to devise a method of performing a certain type of operation he cannot obtain an exclusive property or privilege therein. Neither can a barrister who has devised a particular method of cross-examination or advocacy obtain a monopoly thereof so as to require imitators or followers of his methods to obtain a licence from him.

It seems to me that a method of describing and laying out parcels of land in a plan of subdivision of a greater tract of land in the skill of a solicitor and conveyancer and that of a planning consultant and surveyor. It is an art which belongs to the professional field and is not a manual art or skill.

In the Imperial Chemical case (supra) Mr. Justice Cameron concluded that the term "medicine," (and by analogy "surgical") are to be interpreted broadly, in the ordinary vernacular sense. Thus:

The word "medicine" and the word "medication" as so used are not terms of art. Instead they are words of the vernacular, of common parlance, and must therefore be interpreted in their ordinary sense.

and

the correct judicial approach to the question has been definitively stated by the Supreme Court of Canada. (See Parke, Davis & Co. v Fine Chemicals of Canada Ltd. 30 C.P.R. 59 at p. 66 where Martland, J., said, "I agree with Thurlow, J. [27 C.P.R. 117] that the word 'medicine' as used in s. 41 of the Act should be interpreted broadly....").

When we look at Applicant's processes we find that it covers drilling into a patient's tooth and implanting an object in it. It is true that the objective is not to stop decay in the tooth, but we believe it is still essentially a dental procedure. Dr. Samis said at the Hearing that any person capable of handling a dental drill could be taught the necessary technique in a short period of time, but we do not think that is germane to the question before us. Drilling teeth, embedding a foreign object in it, and properly sealing the cavity requires precision and care. One must avoid infection, destruction of the tooth nerve, haemorrhaging, after effects and the like. In some instances anaesthetics may be required. One should assess whether the tooth is in fit condition for the operation in the first place. All this comes within the skill and competence of a qualified dentist. Indeed in most, if not all jurisdictions within Canada, it can legally be performed only by a dentist. See The Dentist Act of Quebec, R.S.Q. 1964, c. 253, s. 134 or The Dentistry Act of Ontario, R.S.O. 1970, c. 108, s. 21.

Applicant's argument is the same one as that used in the Tennessee Eastman case, 62 CPR 117 at 124, and rejected by the court:

The Examiner has suggested that the success of the process is dependent on the skill and knowledge of the physical and the physiological processes of the patient. Although the success of the method may depend somewhat on the persons using the compositions, the disclosure amply outlines the exact procedure on, for example, page 7, for applying the adhesive to form a firm bond. A physician may normally apply the method, however, it is not considered that any skill, knowledge or training would be required such as that demanded of a physician. Certainly a physician is not the only person who may close a wound by suturing as it is common for athletes to be treated by others such as trainers, etc., to close wounds obtained during sport contests. The procedure of the instant invention thus may be readily followed by others and does not require the skill and knowledge of a physician to use and may be employed by non-professional medical people....

The Exchequer Court's answer to that was given at p. 155:

...The method lies essentially in the professional field of surgery and treatment of the human body, even though it may be applied at times, by persons not in that field. (underlining added)

In the present case we are convinced that the method claims lie essentially in the field of dentistry and would normally be performed by dentists. Contrary to what Applicant contends, we believe the success of the operation would depend on the professional skills of the dentist. We are not considering a process for drilling disembodied teeth, but those in the mouth of living human beings, with all the risks and dangers that that involves.

In deciding that the method in question was not an art or process within the meaning of Section 2, Mr. Kerr quoted from several earlier cases, including (at p. 129) Lawson v Commissioner of Patents; National Research Development (also at p. 129); C & W's Application (at p. 130-132); G.E.C.'s Application (at p. 132); Maeder v Busch (at 133 to 135 and 151); Maeder v Ronda (at p. 135) and others. At p. 130 he said:

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).

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. (underlining added)

That brings us to Mr. Mitchell's contention that the process has commercial benefits. In Tennessee Eastman, at p. 154, Mr. Kerr said:

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.

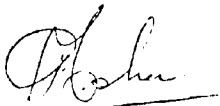
This particular passage was repeated in the affirming decision of the Supreme Court in 8 C.P.R. (2d) 202 at 204.

Mr. Justice Kerr also relied, at p. 134, upon Maeder v Busch (1938) 59 C.L.R. 684, and quoted a lengthy passage including the following:

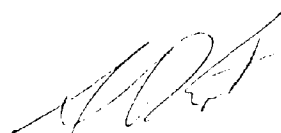
But the object (of the invention) is not to produce or aid the production of an article of commerce. No substance or thing forming a possible subject of commerce or a contribution to the productive arts is to be brought into existence by means of or with the aid of the process.

In the present case the "product" or result of the process are human beings, and not something which is sold in the market place. We are consequently satisfied that Applicant's process does not produce a result "That is essentially economic" in the sense that that term is used in patent law. Fees may be paid to those who carry out Applicant's process, but those fees differ in no respect from those paid medical practitioners or surgeons for their services, which clearly fall outside the scope of Section 2. That argument would not apply, of course, to the product of claims 16 to 26, which were considered allowable by the Examiner.

We have concluded in the present case that the method does not lie "in the field of the manual or productive arts, 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" (Tennessee Eastman per Kerr J. at p. 154). It is a fine art, the success of which depends upon the skill of the dentist performing it. We believe claims 1 - 15 should be refused.

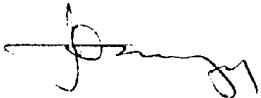


G.A. Asher  
Chairman  
Patent Appeal Board, Canada



S.D. Kot  
Member

I have carefully reviewed the prosecution of this application, and considered the reasons of the Patent Appeal Board. I concur with its reasoning and findings which I now adopt as my own. Claims 1 to 15 are refused. The Applicant has six months within which to remove the claims or to appeal my decision under Section 44 of the Patent Act.

A handwritten signature in dark ink, appearing to read 'J.H.A. Gariepy', with a stylized flourish at the end.

J.H.A. Gariepy  
Commissioner of Patents

Dated at Hull, Quebec

this 31st day of October, 1980