

1927
Feb. 8.
to
Mar. 4.

ELECTROLYTIC ZINC PROCESS COM-
PANY } PLAINTIFF;

AND

FRENCH'S COMPLEX ORE REDUC-
TION COMPANY OF CANADA,
LIMITED } DEFENDANT.

*Patents—Impeachment—Process patent—Vagueness and ambiguity—
Specification—Publici juris—Patentability—Utility*

The patent is for an alleged process for the extraction of zinc from zinc ores containing manganese, by the use of electrolysis. The only novelty claimed is that, whereas prior to the patent the value of the presence of manganese in the electrolyte was not known, and the patentee disclosed its beneficial effect in the deposition of coherent, reguline zinc on the cathode; and that, by the deposit of manganese dioxide at and on the anode, corrosion was prevented and the life of the anode was prolonged. The patent had only three years to run, and had never been used commercially, but only experimentally.

Held, that a patented process to be valid must denote ingenuity of invention. It is not enough in order to constitute invention, to disclose something which has been but dimly seen before.

2. That there is no invention in a mere adaptation of an idea in a well known manner for a well known purpose, without ingenuity, though the adaptation effects an improvement which may supplant an article already on the market.
3. That a patent which has been in existence for fifteen years, and has never been put into practice, notwithstanding that the inventor received a substantial grant of money from the Government to promote his invention, is *prima facie* bad for want of utility.
4. That a patentee must define and limit with precision what he claims to have invented, and everything not clearly claimed becomes *publici juris*.
5. That the patentee must clearly set forth the various steps in a process claimed, and if designedly or unskillfully he makes it ambiguous, vague or indefinite, the patent is bad.
6. That the specification of a patent for a process must point out clearly the method by which the process is to be performed so as to accomplish the object in view. In this case, though necessary, no purification is mentioned; no precise quantity of manganese to be used is mentioned, so that such use may be extended or restrained as occasion may arise in the interest of the patentee,—therefore the patent is bad.

ACTION to impeach a patent granted to defendant's auteur, for an alleged process to extract zinc from zinc lead ores by electrolysis.

The action was tried before the Honourable Mr. Justice Audette, at Montreal, on the 8th to 23th days of February, and 1st to 4th of March, 1927.

W. N. Tilley, K.C., Aimé Geoffrion, K.C., R. C. Crowe,
and *A. W. Langmuir* for plaintiff.

Russell S. Smart, K.C., and J. Gérin Lajoie for defend-
ant.

1927
ELECTROLYTIC
ZINC
PROCESS CO.
v.
FRENCH'S
COMPLEX
ORE
REDUCTION
COMPANY OF
CANADA, LTD.

AUDETTE J., at the conclusion of the trial, on the 4th of March, 1927, delivered judgment (1).

The trial has been long: The trial has been long, but it has been exhaustive and very ably argued from every possible angle, thus enabling me to acquaint myself with all of the several intricate and complex questions arising under the present controversy—aided as I was, by a daily copy of the evidence,—and I am at the close of the trial, as well informed as I will ever be—and I shall therefore now proceed to render judgment.

The question of avoidance of a patent as I have said in the course of the trial, is always a difficult question, but, after all, in the end, it resolves itself into a question of fact, which, however, is mixed up with the question of law upon which the tribunal is called upon to adjudicate.

The controversy involved, under the Canadian Patent No. 140,402, of the 14th May, 1912, (which has about three years more to run), consists of an alleged improvement for the treatment of zinc and manganese sulphate solutions, obtained in the hydro-metallurgical processes for the extraction of zinc from zinc lead *refractory ores containing manganese*, by the use of electrolysis.

These words must be well weighed before arriving at any conclusion. That is we are only dealing with ores containing manganese. Indeed, bearing in mind that the patent is for treating ore with manganese, it would, at first sight, appear extraordinary that a monopoly or patent could be obtained for the use of manganese in treating such ore especially when the patent does not state clearly and distinctly, as required by the Act, the quantity of manganese to be used but leaves it to the operator.

All contestation in respect of patent No. 136,341 has been abandoned.

The paramount question to be decided in this case is that of subject-matter.

(1) An appeal has been taken to the Supreme Court of Canada.

1927
 ELECTROLYTIC
 ZINC
 PROCESS Co. The three cardinal requirements necessary for the validity of a patent are: 1. Ingenuity of invention; 2. Novelty; 3. Usefulness.

v.
 FRENCH'S
 COMPLEX
 ORE
 REDUCTION
 COMPANY OF
 CANADA, LTD.
 Audette J.
 Under our patent law a patent is granted as a reward for invention, whereby restraint upon commercial freedom in respect of the use of the patented invention necessarily results; and a court cannot be too careful in insisting that it is only when the requirements of the law have been fully satisfied by the patentee that the public will be prevented from using common and well known articles or processes for a common purpose.

Under the Canadian Patent Act, sec. 7, a patent may be granted to any person who has invented any new and useful art, machine, manufacture, composition of matter, etc., or any new and useful improvement therein, which was not *known or used* by any other person before his invention thereof and which has not been in public use for more than one year previous to the application for the patent.

In the present case we must first inquire whether the alleged improvement implies invention and whether the result therefrom has not been anticipated. Has the present patent brought forth something new with a new result, being the result of skilful ingenuity, consistent with the prior state of the art? That is the question one shall have to inquire into. It is a narrow patent that should therefore receive a strict construction.

To constitute invention it is not enough to disclose something that has been but dimly seen before. There must be ingenuity of invention. There is not in this indefinite and uncertain patent a new clearly and well defined process or method dealing with complex zinc ore containing manganese.

The evidence which has just been most elaborately reviewed by counsel is still present in every one's mind. The facts are numerous, but what I will call the material facts come down to a very narrow compass and in no case would I think it necessary to here again set forth the several allegations and contentions of the parties. We all have in mind the prior patents and the prior art, and it would be too long a matter to review in detail all the prior patents and the prior art. Under the evidence the most the patentee

appears to have done was to adopt, without invention, old processes of substances and of similar nature and to adapt the same to a special purpose, but in the same class of process. It is quite manifest that the patent seeks to accomplish substantially the same result either as previously accomplished or highly analogous thereto. However all of that does not constitute invention. There is no subject matter where invention is wanting. Terrell on Patents, 5th ed., p. 38. The improvement claimed does not involve invention. *British United Shoe Machinery Co. v. Fussell & Sons* (1); *British United Shoe Machinery Co., Ltd. v. Standard Rotary Machine Co.* (2).

1927
 ELECTROLYTIC
 ZINC
 PROCESS Co.
 v.
 FRENCH'S
 COMPLEX
 ORE
 REDUCTION
 COMPANY OF
 CANADA, LTD.
 Audette J.

It cannot be said that the improvement claimed lies so much out of the track of former use as to involve ingenuity of invention. Quite to the contrary.

In considering the prior art and more especially the pioneer patents of Létrange, Lake, Cowper Coles, Siemens and Halske and others who followed up to the French patent, which under some evidence, appear to be embodied in the latter in some manner or another, as explained by Dr. Ingalls, it would seem that the words of Lord Lindley, in the case of *Gadd and Mason v. The Mayor, etc., of Manchester* (3) are especially apposite when he says:

A patent for the mere new use of a known contrivance, without any additional ingenuity in overcoming fresh difficulties, is bad, and cannot be supported. If the new use involves no ingenuity, but is in manner and purposes analogous to the old use, although not quite the same, there is no invention.

If French's process, as explained in the specification, is to be found in the prior art as contended by Dr. Ingalls, it becomes not an invention but a mere aggregation.

There is even no invention in a mere adaptation of an idea in a well known manner for a well known purpose, without ingenuity, though the adaptation effects an improvement which may supplant an article already on the market. *Carter v. Leyson* (4). Besides the evidence on commission on behalf of both parties, and more especially the all important testimony of the chemist Engelhardt, I have had the advantage to hear, as part of the plaintiff's

(1) [1908] 25 R.P.C. 631.

(3) [1892] 9 R.P.C. 516, at p. 524.

(2) [1917] 35 R.P.C. 33.

(4) [1902] 19 R.P.C. 473.

1927
 ELECTROLYTIC
 ZINC
 PROCESS CO.
 v.
 FRENCH'S
 COMPLEX
 ORE
 REDUCTION
 COMPANY OF
 CANADA, LTD.
 Audette J.

case, men, I might say, the most qualified to speak upon this subject-matter in our days; some of them, however, are officers of the plaintiff company—a matter I do not overlook. The most prominent experts heard on behalf of the defense appear to me to be men who were not quite sure of the ground they were treading upon, with, however, the exception of one of them whose testimony was especially theoretical and of sweeping authority in his own estimation, mitigated by exhibit 68, his letter to Mr. Stuart. I speak of the son of the patentee who is interested in the defendant company as one of its directors. Witness Witherell's experience upon the treatment of zinc originates with the present case and his laboratory experiments filed of record were so materially criticized in rebuttal, that they are left bereft of much use to the court. Witness Mathewson has no operator's experience and is without the knowledge acquired by experiments or personal practice in electrolysing zinc; his fees, as witness, are controlled by the result of the present case to the extent of 2½ per cent on the net recovery of the patent. Some parts of his testimony, however, certainly confirm the views I entertain as to the want of novelty and invention in the patent in question.

All these eminent chemists and metallurgists were called on each side, and the two sides do not agree—therefore in this conflict of testimony I am not at liberty, but I am bound to exercise my own judgment, and that judgment agrees with the weighty evidence of the plaintiff.

Ever and anon, in the course of the trial, these witnesses have described in every detail all known metallurgic processes,—including the one in question, as well as the metallurgic art controlling the same.

Dr. Ingalls, a witness of unusual knowledge and experience in the metallurgic art, has described and considered with great competence, every substantial allegation in the defendant's patent and has demonstrated and established beyond any doubt that each and every one of them has been anticipated and belongs to the prior art. There is, according to his views, not one single element of the patent which is not found in the prior art.

At the close of the plaintiff's case, counsel for the defense in the opening of his case, changing somewhat the

controversy—has brought the issues down to a very narrow compass in stating that the question was whether (pp. 821 and 822)

at the date of the patent the use of manganese is an advantageous thing to do; and if the patentee Andrew Gordon French was the first in this art to say: Maintain manganese sulphate in the electrolyte and it is a benefit,—then this patent is good. If it is no benefit or if it is a detriment—which is a pure question of fact, then he (French) would not have contributed anything . . .

Then at p. 822 he added:

I intend to show that as a matter of fact it is a benefit and if as a fact I cannot convince your Lordship that the presence of manganese sulphate in the electrolyte is a benefit, the patent is gone because he (French) has not contributed anything.

This declaration by counsel would to that extent narrow the issues very materially, but I find that no such statement as alleged can be found in any of the 8 claims of the patent, and were it so, could it be a valid subject-matter under the circumstances of the present case?

Even if it were in the specification—a statement which I do not find—if it is not embodied in the claims it becomes *publici juris*. It has been given to the public. The patentee must define and limit with precision what he claims to have invented and I cannot find such a statement in the claims. Under the provisions of sec. 13 of the Act the patentee must set forth clearly the various steps in a process, and if designedly or unskilfully he makes it ambiguous, vague or indefinite, the patent becomes obviously bad.

No purification is mentioned in the patent and it is in the evidence that purification is necessary. Moreover no precise or definite quantity of manganese to be used is mentioned in either the specifications or the claims which are drafted in such a way that such use may be extended or restricted as occasion might arise in the interest of the patentee. And it must be noted that this is done with respect to the use of a complex ore which already contains manganese. *British Ore Concentration Syndicate Ltd. v. Minerals Separation Ltd.* (1).

Is there anywhere in the claims a statement showing that the adjusting of manganese sulphate in the solution would affect the toxic impurities—I fail to plainly see it. The patent does not show that the impurities must be taken

1927
 ELECTROLYTIC
 ZINC
 PROCESS Co.
 v.
 FRENCH'S
 COMPLEX
 ORE
 REDUCTION
 COMPANY OF
 CANADA, LTD.
 Audette J.

(1) [1909] 27 R.P.C. 33.

1927 out, although Mr. T. French, in his letter, exhibit 68, pro-
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ZINC
 PROCESS Co. The specification of a patent for a process must point
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 FRENCH'S formed so as to accomplish the object in view; if it does
 COMPLEX not it will be a statement of principle or discovery only and
 ORE the patent would be bad. Nicolas, page 5. It must in-
 REDUCTION dicating the essence of the invention and not be a mere pre-
 COMPANY OF scription.
 CANADA, LTD.
 Audette J.

I find that the defendant's patent does not possess any element of invention and I can, in no sense, find any creative work of an inventive faculty which the patent laws are intended to encourage and reward.

In the case of *Yates v. Great Western R.W. Co.* (1) it was held although the patented article was a most useful contrivance it could not be the subject of a patent as it was wanting in the element of invention.

Now I cannot overlook the important fact that this patent dating back to May, 1912, has only up to date (it has only three years to run), been experimented upon in laboratories and otherwise, and that it has never been used commercially. That, coupled with the evidence above referred to, shows if such a patent were maintained any longer that an intolerable nuisance would arise, amounting to a serious impediment in the development of the art and trade in the metallurgic treatment of zinc mentioned in the case.

As was said by Jessel M.R. in *Otto v. Linford* (2); *Hinks & Sons v. Safety Lighting Co.* (3), it is *prima facie* evidence of want of utility if the patented article has never been put into practice. Utility being one of the cardinal requirements for the validity of a patent would make these findings quite apposite. See also *Charlesworth Peebles & Co. v. British Thomson-Houston Co., Ltd.* (4). This patent has been in existence for practically 15 years, has been helped by the B.C. Government by a sum of \$65,000 and has never been put into practice.

(1) [1877] 2 A.R. (Ont.) 226.

(3) [1876] 4 Ch. D. 607, at p. 616.

(2) [1882] 46 L.T. 335, at p. 41.

(4) [1925] 41 T.L.R. 259, at p. 261.

Looking to what was known and published at the date of the defendant's patent, there was no invention in the process. As most of the zinc ores contain manganese, the patentee cannot claim the right to limit to himself the use of a solution containing manganese, and the question of fixing the proportion of manganese to be used does not amount to ingenuity of invention—however valuable it may be, and it is not defined in the patent.

1927
 ELECTROLYTIC
 ZINC
 PROCESS Co.
 v.
 FRENCH'S
 COMPLEX
 ORE
 REDUCTION
 COMPANY OF
 CANADA, LTD.

Free from all the verbiage of the evidence it cannot be found there was invention in the present case. Indeed it does not follow by any means that the use of manganese claimed by the patent lay in a discovery based on a new invention. Is it not a mode of treating zinc by increased skill arising from what can be no more than improvement in the technical art of metallurgical work? The weight of the evidence answers that in the affirmative. *The Cassel Gold Extracting Company, Limited v. The Cyanide Gold Recovery Syndicate, Limited* (1).

Audette J.

The use of manganese as mentioned in the patent, I am unable to take as a patentable improvement under the circumstances.

Therefore the defendant's patent No. 140,402 is hereby adjudged and declared to be invalid, null and void for the reasons above mentioned. The whole with costs.

Judgment accordingly.

Solicitors for plaintiff: *Osler, Hoskin & Harcourt.*

Solicitors for defendant: *Kavanagh, Lajoie & Lacoste.*