

In the Privy Council.

ON APPEAL FROM THE SUPREME COURT OF CANADA

Between:

JOHN A. RICE

(Defendant) APPELLANT:

AND

FRITZ RICDOLF CHRISTIANI and AAZE NIELSEN, trading under the name, firm and style of Christiani & Nielsen, and the said CHRISTIANI & NIELSEN.

(Plaintiffs) RESPONDENT.

CASE FOR APPELLANT.

RECORD.

- 1. This is an appeal by special leave from the judgment of the pp. 136-150 Supreme Court of Canada dated on June 11th, 1930, allowing an appeal from the judgment of the President of the Exchequer Court of Canada pp. 100-107 and adjudging invalid and void a patent (No. 252,546) granted to the appellant on August 11th, 1925, for a new building material and the process of making it; the material described is a cellular concrete prepared by 20 stirring the bubbles of a tenacious foam with cementitious material so as to obtain a concrete full of cavities due to the presence of the bubbles.
 - 2. The action was brought by the respondents to impeach the appellant's patent on the ground that the invention upon which it was based had been made by one Bayer in Denmark at a date earlier than that at which the appellant had made it in the United States. Their contention was rejected at the trial, the President of the Exchequer

Court being of opinion that, although Bayer had been the earlier to conceive the idea of the invention, the appellant had been the first to complete it in a legal sense. The Supreme Court was, however, of the opposite opinion, and its judgment is chiefly concerned with a question with which the learned trial judge had not found it necessary to deal, viz: the question whether in order to set aside an otherwise valid patent, it is sufficient to show that prior to the date of the invention upon which it is based, the same invention had been privately known or used by others in a foreign country. The Court held that proof of prior public knowledge or public use was unnecessary, and accordingly declared the patent invalid.

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- p. 80, 1. 24 p. 100, 1. 22 p. 137, 11. 1-4 pp. 13-21
- The appellant's invention upon which his patent was based was made by him in the United States in November and December, 1922. He applied for a United States patent on it on December 21st, 1922, and, as has been held by both Courts below, is entitled to priority in Canada as of that date by virtue of the International Convention and the provisions of section 8(2) of the Patent Act. On behalf of the respondents oral evidence was given that Bayer in Denmark had conceived the idea early in 1921 and had followed it up by a number of experiments made by him alone and with the assistance of two university professors, these experiments being directed to reducing it to practical form. This oral 20 evidence was supported by proof that in the course of the making of the experiments Bayer, on September 11th, 1922, made an application for a Danish patent, the application remaining unpublished until the patent issued on June 19th, 1923, by which time the appellant's invention had p. 80, 11. 28 to 39 gone into commercial use.

p. 161, 1. 22

p. 164, 1. 20

- The question of law with which the judgment of the Supreme Court is chiefly concerned turns on the interpretation of Section 7(1) of the Patent Act, which is in the following terms, the important words being italicised:-
 - "7. (1). Any person who has invented any new and useful art, pro- 30 cess, machine, manufacture or composition of matter, or any new and useful improvements thereof, not known or used by others before his invention thereof and not patented or described in any printed publication in this or any foreign country more than two years prior to his application and not in public use or on sale in this country for more than two years prior to his application may, on a petition to that effect, presented to the Commissioner, and on compliance with the other requirements of this Act, obtain a patent granting to such person an exclusive property in such invention".
- Prior to the present judgment, the rule as laid down in Canada by two successive Judges of the Exchequer Court was that a later in- 40 ventor who promptly applied for a patent was entitled to a grant notwithstanding the prior private knowledge of an earlier independent inventor who made no application: Queen vs. LaForce (1890) 4 Ex. C.R. 14; Gerrard vs. Cary, (1926) Ex. C.R. 170. The earlier of these decisions

was based upon an examination of the phraseology in which the provision corresponding to the section above quoted had before that time appeared in successive revisions of the Patent Act; the later was based largely upon the interpretation placed by the Courts in England upon the analogous words of the Statute of Monopolies, which forbids the issue of patents except to inventors of new manufactures "which others at the time of the making of such letters patent and grants shall not use", an expression which has been uniformly held to apply only to a public use.

pp. 129-130

6. The Supreme Court in its judgment under appeal does not even mention the Statute of Monopolies or the English decisions thereon, and expresses the view that the conclusions arrived at by the Judges of the Exchequer Court involve a construction of the material phrase in section 7(1) of the Patent Act which is contrary to its strict grammatical meaning, since so to interpret it would require it to be read as if the words "by p. 141, 11. 13-31 the public" followed the words "known or used".

In the appellant's submission there is no more ground for refusing to introduce such a qualification into the Canadian statutory phrase than into the corresponding phrase of the Statute of Monopolies, and no sound reason for denying the application in Canada of a very old and well-settled principle of English patent law adapted to protect patentees against attacks on their patents based on evidence of unpublished knowledge which, ex hypothesi, no patentee could either anticipate or check, and which may never become available to the public.

- 7. Moreover, the Supreme Court supports its conclusion on this point by what is, in the appellant's submission, an erroneous inference drawn from certain expressions which occur in the judgment of the Privy Council in Canadian General Electric Company, Ltd. vs. Fada Radio Ltd., (1930) A.C. 97, 47 R.P.C. 69. By that judgment the patent then under attack was upheld on the ground that the patentee had in fact been the first to make the invention, but by way of preliminary to the consideration of this question Lord Warrington of Clyffe discusses and comments upon a judgment of the Supreme Court of Canada in Wright and Corson vs. Brake Service, (1926) S.C.R. 434, which had been referred to in the course of the argument.
- 8. In the Wright and Corson case the defendant had relied, as invalidating the patent, upon the public use in a garage in the United States of a machine substantially identical with that covered by the patent under consideration. The patentee had argued that this use was irrelevant because a public use, to be material, had to be in Canada, but this argument had been rejected by the Supreme Court on the ground that the expression "not known or used" in the statute as it then stood, was not to be read as limited to Canada, and that a prior public use abroad was accordingly a sufficient objection to the validity of the patent. This decision was relevant in the Fada case because the competing invention upon which the infringer

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chiefly relied had been made in Germany, and knowledge of it had certainly not reached Canada at the date from which the patentee was entitled to claim priority.

9. In the judgment of the Privy Council the earlier decision of the Supreme Court was dealt with as follows ((1930) A.C., at p.106, 47 R. P. C. at p.92):—

"On the other hand, it has been decided by the Supreme Court in Wright & Corson vs. Brake Services Ltd., reported in (1926) Supreme Court Reports, page 434, that the words 'which was not known or used by any other person before his (the applicant's) invention', are not qualified by the words 10 in Canada', and accordingly, if it can be shown that the invention was known or used by any other person in any part of the world before the invention in Canada, that fact alone would render the patent invalid.

"This is a very far-reaching pronouncement. It undoubtedly overturns patent law as understood in England, for it is quite certain that in English law, if A applied for and took out a patent, it would be neither here nor there for B to come forward and say 'I will show that I had already made the discovery, but I kept it to myself'. A had made a contribution to the public by showing them how to practise the invention. B had made no such contribution, and therefore he had no rights in the matter. Also it 20 obviously opens the door to defeat any invention, it may be after a long space of time when it has shown itself to be really valuable, by parol evidence which may be hard to check. Nevertheless as a mere question of construction of the section, their Lordships are not prepared to differ from the Supreme Court on this point."

- 10. The first paragraph of the foregoing quotation accurately states the point decided in the Wright and Corson case, but obviously the second paragraph has no relation to that point. On the argument of the Fada case in the Privy Council counsel for the appellant opened the point that the knowledge and use set up against the patent was private and therefore 30 irrelevant, but he was stopped by the Committee on the ground that it would not consider the question until it had first been dealt with by the Supreme Court. The second paragraph could therefore obviously not have been intended to mean, as it perhaps appears to suggest, that Their Lordships considered the Supreme Court in the Wright and Corson case to have directed itself to a point which was not in question before it, especially in view of the remarks made by Lord Dunedin in Pope vs. Spanish River Pulp and Paper Co. (1928) 46 R.P.C. 23, at p.55, where the law is stated in a sense opposite to that apparently attributed by this paragraph to the Supreme Court judgment delivered two years earlier. 40
- ll. In the judgment now under appeal, however, the Supreme Court, after quoting passages from Their Lordships' judgment in the Fada case, describes its effect as follows:—

p. 132 1. 23

"The holding here, therefore, is that by the date of discovery of the invention is meant the date at which the inventor can prove he has first formulated, either in writing or verbally, a description which affords the means of making that which is invented. There is no necessity of a disclosure to the public. If the inventor wishes to get a patent he will have to give the consideration to the public; but, if he does not and if he makes no application for the patent, while he will run the risk of enjoying no monopoly, he will none the less, if he has communicated his invention to 'others' be the first and true inventor in the eyes of the Canadian patent law as it now stands, so as to prevent any other person from securing a Canadian patent for the same invention."

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The inference so drawn is, in the appellant's submission, a quite erroneous one, Their Lordships' judgment in the *Fada* case, when properly interpreted, not having been intended to lay down the rule which the Supreme Court deduces from it.

12. In the Wright and Corson case, the statutory provision then in force which corresponded to Section 7(1) of the Patent Act was not identical with the section now in force as above quoted. In the section as it now stands there appears to be an obvious antithesis between the phrase "not known or used by others before his invention thereof" and the following phrase "not patented or described in any printed publication in this or any foreign country", and the appellant submits that the omission of any territorial qualification in the first phrase and its insertion in the second clearly leads to the inference that the first phrase is to be given its natural statutory meaning as being confined to Canada while the second is extended to all the countries of the world. So construed, Bayer's knowledge and use here relied on to invalidate the patent would be immaterial, no knowledge or use of the invention in Canada having been proved prior to the date from which the appellant is entitled to priority.

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* * *

13. Turning now to the question upon which the judgment at the trial proceeded, the specification of the appellant's patent in question opens with a statement that the "present invention relates to improvements in p. 186, 1. 11 plastic compositions, and its particular object is to provide a cellular composition or product adapted to be used for . . . practically all purposes that concrete can be used for". This composition is said to be "considerably lighter in weight than the concrete mixtures now commonly used", p. 186, 1. 15 and to contain "a large number of cellular voids adapted to improve the heat insulating and sound insulating properties of the material".

The specification continues:

"The invention embraces especially a method of impregnating cement p. 186, 1. 18 while in a dry or soft state with gas bubbles, preferably produced by whip-

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ping a gelatinous substance in the presence of water into a foam or lather . . . The bubbles thus formed mix readily with the cement and occupy space within the same, and in this respect may be described as taking the place of gravel or rock now commonly used in the mixing of concrete in addition to sand.

"In the preferred form of my invention I use a mixture comprising Portland cement, water and gas bubbles. The Portland cement, or clay, or magnesite, or any other equivalent is preferably mixed with sand either in the presence of water, or in a dry state. The gas bubbles are preferably produced by whipping a gelatine mixture, such as a mixture of the following 10 materials, viz: 1% glue, 98 4-5% water, 1-5 of 1% formalin solution (containing say about 40% of formaldehyde)".

The specification then indicates the method in which the invention is to be carried out, and proceeds to give various alternatives to the formula above quoted. Twenty claims follow, some being directed to the product and some to the process. The most general process claim is:

p. 189, 1. 29

"2. The process of producing a cellular product which consists in mixing a tenacious stable foam with a cement material and allowing the mixture to harden",

and the narrowest process claim is:

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p. 190, 1. 18

"13. The process of producing a cellular cement which comprises whipping a mixture of 1 per cent. of glue, 98 4-5 per cent. of water and 1-5 of 1 per cent. formalin into a stiff foam, for creating bubbles and stirring the foam into a cement".

14. The evidence as to Bayer's activities was that early in 1921 he had conceived the idea of making a cellular cement product while

p. 13, 11. 26-31 p. 14, 11. 3, 23

p. 16, 11. 1-27p. 17, 1. 21pp. 155-160

p. 16, 1. 14

p. 20, 11. 22-37

watching his wife beating eggs. He made certain experiments himself with shaving soap as a foam producing agent, and obtained the assistance of two university professors to help him develop his idea. The more active of his two assistants had made a number of experiments, "perhaps 30 one thousand to five thousand, but I think it was around one thousand", some of these being before and some of them after the filing by Bayer of his Danish patent application on September 11th, 1922. It appears that certain of the experiments resulted in the formation of a cell concrete, but no evidence was given as to which of the apparently numerous formula tested in 1921 and 1922 gave satisfactory results and which failed to do so. In the commercial use of Bayer's invention by the respondents in and after 1923 the formula used was one containing soap and glue according to an unspecified formula which was clearly not one the use of which was contemplated by Bayer in the preceding year.

15. Like the oral evidence, the disclosure in Bayer's Danish patent application is extremely vague. The specification opens with statements that:

"The invention relates to a method of manufacturing porous materials p. 164, 11. 23-30 for building purposes, etc., from substances, which set when mixed with water or other fluids, for instance, cement and gypsum, and the process consists of adding frothy substances in an indifferent manner during the treatment of the substance with the mixing fluid".

"It has turned out that a suitable choice of such substances makes it possible to produce a foam which, during the ensuing shaping of the material, is of such a durability that a great number of air bubbles are left in the mass".

10 After referring to the method of mixing, the specification continues:

"As foamy substance, different kinds of mucilage, for instance, the p. 165, 11. 4-7 mucilage obtained from sea-tang, the so-called tangin, may be used. The durability of the foam obtained from such substances may be increased by adding gelatine". . .

"In certain cases it has been observed that the durability of the foam is p. 165, 11. 9-10 further increased by adding small portions of formaldehyde".

The principal claim is in the following terms:

"1. Method of manufacturing porous building materials from sub- p. 165, 1, 15 stances which are setting [set?] when mixed with water or other fluids, characterized by the fact that the foamy substances from which foam is produced before the setting, for instance, by the introduction of compressed air or foam already developed from such substances, are added to the mixing fluid or to a mixture of same and the setting substance".

The remaining claims are narrower, being limited to the use of foamy substances prepared from a mucilage, e.g. tangin, with or without gelatine and/or formaldehyde.

16. At the trial evidence was given that attempts to make a cell p. 65, 1. 9 to concrete from the most commonly available sea-weed mucilage were unsuccessful, and the expert witness called by the appellant gave it as his opinion 30 that no mucilage, in the proper sense of a vegetable gum extract, could be p. 69, 11. 10-21 used with success for the purpose proposed. On behalf of the respondent evidence was given that Bayer's Danish specification had contained sufficient information to permit the successful production of a cellular con- pp. 29-31 crete with saponin and also with laundry soap, and, after certin experi-ments, with Irish moss, but that an attempt to obtain satisfactory results with glue had failed.

17. On this evidence the learned trial judge found that the appellant had failed to establish that Bayer had reduced his invention to a definite and practical shape at a date as early as the appellant, starting 40 from the same conception, had succeeded in doing, and he accordingly dis-

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p. 106, 1. 44

p. 147, 1. 25

p. 148, 1. 13

p. 148, 1. 43

p. 146, 1. 29

missed the action. In his opinion "the invention lay in producing the process or means of making" the idea of a cellular concrete "commercially practical", but the Supreme Court took a different view of what constituted the invention. This the Court held Bayer had completed "when he added a foam made of a frothy substance to a paste of cement and got a porous cement product". It considered that the application of the idea was extremely simple, since it was common knowledge that "a stable foam could be made from a great many well known mucilaginous substances", and accordingly held that Bayer's invention had been made in 1921 when he first made a sample of cellular cement, and that, thus 10 defined, it had been sufficiently disclosed to others in connection with the subsequent experiments. In this view Bayer's recognition of the necessity of further experiment, and the indication of the denciency of his knowledge afforded by his patent application, became immaterial.

In the appellant's humble submission, the view of the Supreme Court is erroneous, and is not in accord with the decision of the Privy Council in Permutit vs. Borrowman, (1926) 43 R. P. C. 357. It is in effect common ground that attempts to make even small samples of cellular concrete without a specific formula for the foam fail in the hands of competent persons, and the selection of a foam adapted for the production of a 20 practical cellular concrete building material (which was the object of both inventors) obviously involves still greater difficulty. The appellant accordingly contends that the invention cannot be said to consist in the mere idea of making a cellular concrete with a foamy material or even in the production of a small sample of cellular concrete. There cannot, in his submission, be said to have been any invention until a selection has been made of a formula for a foamy material adapted to make bubbles sufficiently tenacious and stable to ensure that, after they have been mixed with cementitious material in a practical way, the resulting product will be a cellular concrete capable of a commercial use in the construction 30 of buildings.

In the appellant's humble submission, the learned trial Judge was right in his conclusion that, as it appeared that the appellant and not Bayer was the first to arrive at an appropriate practical formula, he and not Bayer was therefore the first to make the invention and to become entitled to a patent upon it.

* * *

18. In the Supreme Court the appellant contended that even if the learned trial judge's conclusion was held to be erroneous, the appellant's specific claims for the use of a tenacious foam prepared according to his 40 preferred formula should nevertheless not be declared invalid, since neither that formula nor anything like it had been within Bayer's contemplation, and it was shown to be the most satisfactory formula the appellant had

used up to the time of the trial. The Court nevertheless held these claims invalid on a point which had neither been raised at the trial nor argued in appeal, and, as the appellant humbly contends, was not well taken.

- 19. The Court referred on this point to section 59 of the *Patent Act*, which authorizes the Commissioner of Patents to make, with the approval of the Governor in Council, "such rules and regulations . . . as appear to him necessary and expedient for the purpose of this Act", and to a rule made by the Commissioner thereunder of which no evidence had been given. This rule is in the following terms:
- 14. Two or more separate inventions cannot be claimed in one application, nor included in one patent. But if separate matters are represented to be so dependent on, and connected with, each other as to be necessarily taken together, to obtain the end sought for by the inventor, the Commissioner of Patents shall be the judge whether or not the pretentions of the applicant in such respect can be entertained."
- 20. The Court considered that, as the appellant's patent was "for the principle of producing a cellular or porous cement product by mixing p. 149, 11. 25-28 a tenacious stable foam with a cementitious material" and "not for an invention consisting of a particular new method of applying that principle",

 20 it was not proper, having regard to the rule, that the patent should "now p. 149, 1. 32 be transformed into and restricted to a patent for that kind of invention".

In the appellant's humble submission this conclusion is erroneous on several grounds, viz (a) That no rule made by the Commissioner should or could be so construed as to deprive a patentee of his rights given him by the statute; (b) that, having regard to the terms of the rule in question, the Commissioner must, if the patent covers more than one invention, be taken, at least in the absence of evidence to the contrary, to have exercised his discretion in favour of permitting it to issue; (c) that a patent including both general claims covering any mode of carrying the 30 invention into effect, and specific claims limited to a special mode of doing so, cannot properly be construed as covering more than one invention, and (d) that in any event it was clearly not the intention of either the Act or the rules that otherwise valid claims in a patent should be held invalid on the ground that the Commissioner had disobeyed his own rule in permitting it to issue in the form in which it is found, especially when all the claims would have been separately supportable apart from the bringing to light of knowledge or use by others which is said to have been prior to the date of the patentee's invention, but as to which he had not and could not have had any information at the date of the issue of the 40 patent to him.

21. The appellant therefore submits that the appeal should be allowed and that the judgment of the learned trial Judge dismissing the action should be restored, for the following among other

REASONS

- 1. Because the phrase "not known or used by others before his invention thereof" in section 7(1) of the *Patent Act*, is not to be interpreted as applying to knowledge not in the possession of the public or to private or secret use.
- 2. Because the said phrase is not to be interpreted as extending to knowledge or use elsewhere than in Canada.
- 3. Because the evidence does not establish that the appellant's invention in a practical and definite shape was known or used by others anywhere before it was made by the appellant, and
- 4. Because the specific claims in the appellant's patent should in any event have been held to be valid.

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