Lallubhai Chakubhai Jarivala vs Shamaldas Sankalchand Shah on 20 March, 1934

Equivalent citations: (1934)36BOMLR881

JUDGMENT

John Beaumont, Kt., C.J.

1. This is an appeal from a judgment of Mr. Justice Broomfield in a patent action. The material facts are that in the year 1927, the plaintiff, who is a chemist, started a business in partnership with one Girdharlal, who is the brother of the defendant, the name of the firm being Jarivalla Shah & Co. The defendant was a clerk in the employment of the firm. The firm had an experimental branch which carried on business in the name of Jasco & Co., that firm being in charge of one Dr. Patel. In August, 1928, the plaintiff left for Europe, leaving Dr. Patel in charge of the chemistry department. In February, 1929, the plaintiff returned to Bombay, and shortly thereafter Dr. Patel left the employment of the firm. In or about October, 1929, a firm called Harak-chand Shivji & Co. approached the plaintiff and asked him whether he could introduce a system of producing white almonds by some process of bleaching the shells. On November 9, 1929, the plaintiff commenced experiments in that connection in his laboratory. Early in 1930, the business of Jasco & Co. was sold to a firm called Chimanlal Chunilal & Co., and a chemist named Varmani, who had been employed in the Jasco company and is a material witness, continued in the employment of the purchasers. In April, 1930, Harakchand Shivji & Co. commenced to sell whitened almonds which had been treated by a process which the plaintiff had tried in his laboratory. For some months that process was used, but it was found unsatisfactory because the process affected the taste of the kernel of the almonds, and in the autumn of 1930 Harakchand Shivji & Co. ceased to deal in those almonds. They had been paying the plaintiff Rs. 300 per month for his services, and when they ceased to deal in the almonds, they ceased that payment. In November, 1930, after experimenting for about a year, the plaintiff discovered a satisfactory process for whitening the shells of the almonds. Varmani helped the plaintiff in his experiments and learned about the process in confidence. That process was finally established by tests on almonds by February 27, 1931. In or about November, 1930, Harakchand Shivji & Co. re-started paying Rs. 300 per month to the plaintiff and they started to sell almonds dealt with under the new process. In or about January, 1931, Varmani ceased to be employed by Jasco & Co., and in or about June he made an arrangement with the defendant under which he was to teach the defendant how to bleach almonds in his factory, and the defendant made arrangements with the merchants with whom he was doing business by which the latter agreed to purchase from the defendant almonds treated under the process explained by Varmani and to erect a factory where the process could be employed. This was done by October, 1931. On July 4, 1931, the plaintiff applied for letters patent in respect of his process of treating almonds, and the letters patent were granted on April 27, 1932, the grant relating back to the date of the application.

2. The first issue raised before the learned Judge was, whether the process described in the specification, exhibit A to the plaint, is an invention, and the learned Judge answered that in the negative. Now, the salient feature of the process is that bleaching powder is used on the almonds in conjunction with sulphur dioxide, and they are treated under a pressure of five lbs. per square inch in a closed chamber. I think the criticism which may be made upon the very careful judgment of the learned Judge on this issue is, that he is rather too analytical, and he considers the various component parts of the specification without considering the combination. It seems to me on the evidence to be clear that the particular combination which gave satisfactory commercial results for the first time was only arrived at by the plaintiff after a year of experiments, and that no one else had arrived at a similar process, and further, that there was a demand in the market for whitened almonds-though why there should be such a demand I do not know. But the evidence is that there was a demand for these whitened almonds, and the merchants thought they could get a better price for almonds in that state than for almonds in their natural state; and, in my opinion, on the evidence the plaintiff has proved that he showed a sufficient amount of inventive genius in arriving at this method to justify the grant of letters patent in respect thereof. I think, therefore, the first issue should be answered in the affirmative.

3. The second issue is, whether the plaintiff is the true and first inventor of the said process. That issue was not answered by the learned Judge because the answer to it was unnecessary in view of his answer to the first issue. But he indicates a view that Dr. Patel was the first inventor. I am not inclined to accept that view. Dr. Patel left the plaintiff's firm in March, 1929, and he says that he had been experimenting on almonds and left his notes of experiments with the firm. Those notes were not forth-coming at the trial. They were afterwards discovered by the plaintiff, who made an application to review the judgment in the light of those notes. That application quite properly failed. The notes are not in evidence, and I only mention them to show that their suppression cannot be charged against the plaintiff. Assuming that the plaintiff did get the notes of Dr. Patel, and that the notes dealt with almonds, it seems to be quite plain that his process cannot have been the one which the plaintiff subsequently invented, because if it had been, there was no reason why the plaintiff in the middle of 1930 should have introduced a different and unsatisfactory system and should have spent a year in discovering his new process. I have no doubt, therefore, that the second issue should also be answered in the affirmative.

4. Then the third issue relates to prior user. As originally framed, it was in these terms:

> Whether the process and other matters in respect of which the plaintiff claims rights as patentee were publicly used (long) prior to the issue of the patent by the firm of Jarivalla Shah and Company.

5. Then that issue was amended, after the close of the plantiff's case, by adding the words " or by anybody else ". Now the only plea with regard to this issue was of prior user by the firm of Jarivalla Shah & Co. It is proved that Girdharlal, who was the only partner with the plaintiff, left the firm in October, 1930, before the invention was made, and, therefore, the invention could not have been used by the firm of Jarivalla Shah & Co. I think the written statement and original issue might be treated by a liberal construction as including prior user by the plaintiff's firm or by the plaintiff, but

in my view the addition to the issue of the words "or by anybody else" ought not to have been allowed after the close of the plaintiff's case. No doubt there may be cases in which, at the close of the plaintiff's case, or even later, it may appear that the issues as originally framed do not bring out the real point in dispute. But, in my opinion, no such case was made out here. One of the plaintiff's witnesses had mentioned the names of certain firms who were alleged to be infringing the plaintiff's patent, and I gather that these firms were approached by the plaintiff's advisers with a view to find out whether they were prepared to say that they had treated nuts in accordance with the plaintiff's process before July, 1930, when the application was made for the patent, and the issue was amended to let in that evidence. Of course, it is obvious that those firms were interested in attacking the plaintiff's patent which they were alleged to have been infringing. If their evidence be admitted, it is clearly necessary to scrutinize it with great care. In my opinion the evidence comes to nothing. All that these witnesses say is that they were treating nuts with bleaching powder in April, 1931, but they do not establish the fact that they were using the process discovered by the plaintiff, nor do they suggest that they learned of the plaintiff's process, the implication of their evidence being that they had arrived at their process independently.

6. There is nothing, in my opinion, in their evidence to suggest that the process they used was the subject of the subsequent application by the plaintiff for letters patent. Therefore, I think, the only question which arises on the third issue is, whether the plaintiff himself used his process in such a way as to disentitle him to apply for letters patent.

7. Mr. Khan on behalf of the defendant has put the case of prior user by the plaintiff on two grounds. He says, first of all, that on the evidence the process was used openly by the plaintiff between February and July, 1931, in the factory of Harakchand Shivji & Co., and, secondly, that it is established that Harakchand Shivji & Co. during those four months sold in the open market on a commercial basis nuts treated by the plaintiff's process, and that by itself constitutes public user.

8. The first question depends entirely on the evidence, because there can be no doubt that if the plaintiff treated nuts by his process openly in the factory of Harakchand Shivji & Co., so that anybody could come and see what the process was, that would be a public user of the process which would disentitle him from applying for letters patent. Unfortunately, there was no specific issue as to pen manufacture by the plaintiff during those four months, and the point was not put to the plaintiff in cross-examination. The evidence of Varmani, who had admittedly helped the plaintiff in the process of his manufacture and in his experiments and who undoubtedly knew about the process, does deal with this point, and he says that the plaintiff deliberately excluded people during the process of gassification with a view to preventing anybody discovering the secret of the process. On the other hand, some of the witnesses do suggest that the manufacture was done openly in the factory of Harakchand Shivji & Co., in particular the witness Premji, who was the manager of Harakchand Shivji & Co.'s factory, says : " The bleaching work in our factory was done openly. People from outside and employees could come into the factory if they had any work." But that witness is not a chemist, and he is not in a position to know to what extent people coming into the factory would be able to ascertain the secrets of the process, and I am not prepared to accept his evidence on that point as against the evidence of Varmani. There is also the very significant fact that nobody is called to say that he learned the process by going to Harakchand Shivji & Co.'s factory. It

is quite clear on the evidence that the defendant himself desired to bleach almonds by the satisfactory process which the plaintiff was using. But when he desired to adopt that course in June, 1930, he did not go to Harakchand Shivji & Co.'s factory to find out how the process worked, but he got hold of Varmani, who had learned the process from the plaintiff in confidence, and he agreed to pay Varmani Rs. 100 per month during the period he helped the defendant to put up his factory. As soon as the defendant's factory was complete and the defendant had learned the secret of the process, the defendant got rid of Varmani. The fact that he paid Varmani Rs. 100 per month for four months to learn the process is not consistent with the defendant's case that the process could have been learned by going to Harakchand's factory. I think, therefore, the evidence does not establish that, before the letters patent were applied for, the plaintiff had been using his process in public. There is no evidence that any almonds were treated on information supplied by Varmani before the application for letters patent.

9. That brings me, therefore, to the second point raised by Mr. Khan, namely, that the sale of the nuts by Harakchand Shivji & Co. in the open market was by itself public user of the process by which the nuts were treated. There is no doubt that the plaintiff was treating nuts by his process between February and July, 1931, and that Harakchand Shivji & Co. were selling these nuts in the market openly. Unfortunately, we do not know what exactly were the arrangements between the plaintiff and Harakchand Shivji & Co. The plaintiff says:-

> When Harakchand Shivji & Co. employed me the agreement was that they should 'have the exclusive use of the process which I might discover. They have not the use of my process now as they stopped making me any payment since October, 1931.

10. The evidence is that payment of Rs. 300 ceased when other persons started the using of the plaintiff's process. Then further in cross-examination the plaintiff says:-

> Harakchand Shivji & Co. gave up paying me because of defendant's infringement of my process, the result of which was that they did not have the exclusive use of it. It belonged to me, not to Harakchand Shivji & Co.

11. Then in re-examination he says:

> Harakchand Shivji & Co. had only a right to the use of my process as long as they continued to pay me.

12. That is the only evidence on the point, and I gather from this evidence that the intention was that the plaintiff should treat the nuts by his process, and as long as Harakchand Shivji & Co. paid him Rs. 300, they would have the right to sell the nuts, but the process remained the plaintiff's and he was not bound to, and did not, in fact, disclose the process to Harakchand's.

13. Now, in considering how far the sale of an article manufactured under a secret process amounts to a public user of the process, we have to remember the terms of Section 38 of the Indian Patents and Designs Act of 1911. The section provides that an invention shall be deemed to be a new

invention where two features are absent. The first feature is the public user of the invention in British India, and the second feature is secret or experimental user in which the Court considers that excessive profits have been made. So that you have two things, public user or private user for excessive profits which will prevent the invention being a new one, and these two matters seem to be based on two principles underlying the law relating to patents, the first being that there must be no disclosure to the public before the letters patent are applied for, since, if the public already knows the secret there is no consideration for the patent; and the second being that even if there is no public, disclosure, still if the patent has been. used and considerable profits have been made, it is not reasonable to grant a further monopoly.

14. Now, in this case, there is no allegation in the written statement of, and no issue is directed to, secret user, and, therefore, we have not to consider the question whether the plaintiff made excessive profits from any such user. The only issue is, whether there was a public user. Mr. Khan referred us to many cases including Wood v. Zimmer (1815) Holt 58, Heath v. Smith (1842) 9 M & W 300, Carpenter v. Smith (1854) 3 EI & BI. 256, and In the matter of the Inventions and Designs Act (1896) I.L.R. 23 Cal. 702, and he contended on the strength of those cases that if articles are manufactured under a secret process and then sold openly, that amounts to public user of the process. The principle enunciated in the Calcutta case as being that established by the English cases is that where profit is openly derived from the employment of a secret process, there is a public user of such secret process. Now, it is to be noticed that none of those cases were dealing with an Act in the terms of Section 38 of the Indian Patents and Designs Act of 1911, which distinguishes clearly between public user and private user. Whether a process has been publicly used or not is, as all the cases show, a question of fact. I have no doubt that in numerous cases the sale of an article manufactured under a secret process may amount to a public user of the process, because the article may be of such a character that anybody buying it and getting it examined by experts can ascertain the secret of its manufacture, and if the article is of that character, the sale of the article in public would, in my opinion, involve a disclosure of the secret of manufacture and thus amount to public user of the process. But in this case the article manufactured is an almond treated by a particular process which makes the shell whiter and smoother than the shell in its natural state, and I do not myself see how anybody purchasing an almond treated by this process could ascertain the method of treatment, and there is nothing in the evidence on record to lead me to think that this view is wrong It seems to me that, at any rate in a case to which the Indian Patents and Designs Act applies, if you have an article manufactured under a secret process and that article is of such a character that nobody by examining it can find out the secret of that manufacture, then the sale of that article in public cannot amount to public user of the process. That is the case here, and, therefore, in my judgment, the defendant has not succeeded in showing that the process of the plaintiff had been publicly used prior to the issue of the letters patent.

15. The only other issue with which I need deal is the issue as to infringement. That issue the learned Judge has answered in favour of the plaintiff, and I think rightly so. The defendant's process is explained in. exhibit No. 1 to the written statement. It involves the use of bleaching powder and sulphur dioxide, but it does not suggest that any pressure is used, and pressure is one of the essential features of the plaintiff's process. But the plaintiff in his evidence stated that the defendant's process, which involves the use of exhauster, must involve necessarily pressure, and he

was not cross-examined as to that. Both he and Varmani have given evidence that the defendant's process is in all its essential features identical with that of the plaintiff's process.

16. I think, therefore, the plaintiff has proved infringement of his patent, and the appeal must be allowed with costs throughout. There will be an injunction that the defendant, his servants or agents are restrained from infringing the plaintiff's patent rights in patent No. 18164. We certify the validity of the patent in question. Plaintiff does not ask for an inquiry as to damages, which would probably be useless.

17. Two counsel certified.

Rangnekar, J.

18. I agree; but as I am differing from my learned brother Broomfield, for whom I have great respect, I should like to state my reasons as briefly as I can.

19. The plaintiff's case is that the defendant is infringing his patent after having come to know of his process from a man called Varmani, and the defendant's answers are : (1) that the process described in exhibit A to the plaint is not an invention; (2) that the plaintiff is not the true and the first inventor of it (3) that the process claimed by the plaintiff has been publicly used long before the issue of the patent by a firm of which the plaintiff was a partner and was known to all the employees of the firm; and (4) 'that there was no infringement.

20. The patent was in respect of a process described in the specification and applicable to dried fruits, in particular to almonds and betel nuts, and is in these terms:

> The dried fruit is placed in wooden tanks and soaked for about fifteen minutes in sulphuric acid solution 1 : 100 (that is one part sulphuric acid and 100 parts ordinary water). It is then removed from the tank and placed in another tank containing either a solution of bleaching powder 3 : 100 or concentrated bleaching powder known under the trade name perchloren 1 :100 or sodium hypochlorite : 100 and allowed to remain therein for about ten minutes under frequent stirring. The fruit is then removed from the solution and dipped into a two per cent, solution of acetic acid for about twenty-five minutes under frequent stirring. After this treatment the fruit is washed in clean water and put into wooden trays which are arranged on wooden stands inside a room or chamber about 10 feet x 12 feet x 10 feet, and built entirely in cement concrete and coated on the inner side with lead sheets. A lead coated door is used to close the chamber and keep it air and gas tight while a chimney is fitted in the roof with a valve at the upper outlet. An oven is located near the chamber and consists of an iron plate which is heated by gas and serves to burn sulphur which is sprinkled on it the sulphur smoke being mixed with hot air from an injector so that the sulphur dioxide is forced into the chamber through a lead pipe. When a pressure of five pounds per square inch is developed within the chamber the sulphur dioxide current is stopped and the dried fruit is allowed to remain under pressure for one

> hour. After this the valve of the chimney at the top of the chamber is opened and gas is forced out while hot air is blown into the chamber for half an hour. The door of the chamber is then opened and the fruit thus treated is removed and exposed to the outside air for about an hour before being filled into bags for the market.

21. Before this process came to be used several persons undoubtedly used to polish almonds by bleaching them with sulphur fumes. This, on the evidence, I find, left yellow spots on the fruits and also affected the taste of the kernel. The result of the plaintiff's process was to remove these spots and impart a white colour to the shells of the fruits without affecting their taste, quality or flavour, and the process was more expeditious and economical. This, it might be stated, is not denied by the defendant, and is borne out by the evidence on the record. It is admitted by Varmani, who, though called by the plaintiff, was not favourably inclined towards him.

22. The first question is, Is this process, for which a patent is granted to the plaintiff, an invention within the meaning of the Indian Patents and Designs Act, 1911? Section 2(8) defines invention as meaning " any manner of new manufacture, and includes an improvement and an alleged invention ". Section 2(10) says that " Manufacture " includes any art, process or manner of producing, preparing or making an article, and also any article prepared or produced by "manufacture". Manufacture, therefore, comprehends not only productions but also the means or method of producing them, so that a new process or an improvement on an old process will be a manufacture within the meaning of the Act. Applying these definitions it is difficult to see why the plaintiff's process cannot be called an invention. The learned Judge has considered the steps of which the process consists and examined each in the light of the evidence before him separately. His conclusion is as follows:

> When we come to apply the established principles to the plaintiff claim to have invented a new process we are at once met by the difficulty that so few of the details appear to form an essential part of it. The preliminary sulphuric acid washing is admittedly not necessary. Moreover any acid except sulphuric acid would do to get rid of the calcium deposit on the shells. It is not suggested that the use of an acid for this purpose needed invention, and the evidence of the witnesses examined by the defendant goes to show that similar products can be turned out without the use of any acid at all. Again any form of sulphur oven will suffice and apparently no vital importance is to be attached to the pressure of five lbs. per square inch or to the hot air, which the defendant by the way does not use. So that it really seems to come to this that what the plaintiff claims to be new and essential about his process is that for the first: time he combined the use of bleaching powder (not previously used for this purpose) with an up to date method of bleaching in sulphur dioxide (the ordinary process). Now it is true that there seems to be nothing in the books to which reference has been made about the use of bleaching powder and sulphur dioxide combined in the treatment of dried fruits. But, bleaching powder is commonly used for so many different things that the idea of trying it to bleach dried fruits might occur to almost anybody, and if the bleaching powder alone was not satisfactory almost anybody might think of trying it in combination with the ordinary bleaching

medium, sulphur dioxide.

23. With respect to the learned Judge, in my opinion, this is not the correct method of determining whether a process or a method claimed to be an invention is an invention or not. Undoubtedly, the process was in making use of the substances more or less previously known, but the plaintiff's ingenuity and skill was in combining these substances in a particular manner and in a particular sequence so as to prepare and produce an article which admittedly was not produced before, and in overcoming the difficulties which existed even after a crude application of some of these substances previously. Then, there are at least some new features thought of by the plaintiff which had not occurred to the persons in the trade or interested in the experiments for the purpose of whitening the almonds. The learned Judge has found, and, I think, correctly, that bleaching powder was not previously used or tried on dried fruits.

24. Secondly, the effect of a pressure of five lbs. per square inch by means of sulphur dioxide forced into the bleaching chamber with hot air resulted in preserving the kernel and reducing the time of treatment by some hours. Originally, the plaintiff applied the process with steam, but further experiments showed that hot air was far more efficacious for that purpose. This discovery required no less than fifty-eight experiments beginning from February 9, 1929. The fiftieth experiment was made on October 5, 1930, when steam was used. Some more experiments were made thereafter, and as the result of the sixty-fourth experiment made on November 5, 1930, that the efficacy of hot air was discovered. Two further experiments were made, the last one being on November 13, 1930.

25. The law on the subject is stated in Halsbury, Vol. XXII, para. 292, p. 138 as follows:

> A new combination may be the subject-matter of a patent although every part of the combination per se is old, for here the new art is not the parts themselves, but the assembling and working them together, which ex hypothesi is new. If the result produced by such a combination is either a new article, or a better article, or a cheaper article than before, such combination is an invention or a manufacture within the statute and may well be the subject-matter of a patent.

26. I may also refer to a passage which the learned Judge himself has used from Fletcher Moulton on Patents (1913 Edn.), p. 46, which is in these terms:-

> In some cases, and more particularly in the case of chemical patents, a variation of old methods has been held to form subject-matter because it was not possible to predicate the new result from the results of the old method with any certainty or without experiments and research.

27. The above passages, in my opinion, support the view which I am now taking.

28. A new manufacture does not mean only a new article of manufacture, but also means a new process or method of manufacturing something new. It does not mean a new principle of manufacture-a principle cannot be an invention-but it means a new application of the principles so

as to produce a new method or a new manufacture. In Household Coal and Iron Company v. Neilson (1843) 1 Web. P.C. 673; Lord Justice Clark Hope, in directing the jury, observed as follows (p. 685):

> I state to you the law to be that you may obtain a patent for a mode of carrying a principle into effect : and if you suggest and discover, not only the principle, but suggest and invent how it may be applied to a practical result by mechanical contrivance and apparatus, and show that you are aware that no particular sort or modification, or form of the apparatus, is essential in order to obtain benefit from the principle; then you may take out your patent for the mode of carrying it into effect, and are not under the necessity of describing and confining yourself to one form of apparatusYou may generally claim the mode of carrying the principle into effect by mechanical contrivance, so that any sort of apparatus applied in the way stated will more or less produce the benefit, and you are not tied down to any form.

29. In British Vacuum Cleaner Co., Ld. v. Suction Cleaners, Ld.(1904) 21 R.P.C. 303, the invention consisted in a new principle applied to the cleaning of carpets by vacuum. The inventor discovered that it was essential to the success to so drive the pump and apply the pipes that a strong vacuum might be maintained at the carpet and at the filter. Other suctions apparatus had been used before the date of the patent, but no one had appreciated the importance of maintaining a high vacuum. It was argued for the defendants that this was merely a patent on a question of a degree of the vacuum. It was held by Farwell J. (p. 312):

> The whole point of it is, as is stated there, that it is essential to practical success to drive the pump by power and to maintain a vacuum of at least 5 lbs. per square inch at the filter. That appears to me to be a perfectly good process and well and sufficiently stated....
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> Perhaps the best exposition of the law is that contained in Cannington v. Nuttall (1971) 5 H.L. 205, where Lord Hatherly L.C. observed (p. 216):
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> It is quite apparent,...that the cooling thing, the current of air, was nothing new-it is as old as the fables of sop-it is as old as the man blowing his soup in order to make it cool. But so it is with every invention-the skill and ingenuity of the inventor are shewn in the application of the well-known principles. Few things come to be known now in the shape of new principles, but the object of an invention generally is the applying of the well-known principles to the achievement of a practical result not: yet achieved. And I take it that the test of novelty is this : Is the product which is the result of the apparatus for which an inventor claims letters patent, effectively obtained by means of your new apparatus, whereas it had never before been effectively obtained by any of the separate portions of the apparatus which you have now combined into one valuable whole for the purpose of effecting the object you have in view?

30. The point of a combination patent is that the elements of which the combination consists is to produce one result. The merit depends upon the result produced. Frost in Vol. I of his Patent Law and Practice, 4th Edn., observes as follows (p. 74):

> The merit of a new combination very much depends on the result produced. When a very slight alteration turns that which was practically useless into what is useful and important, the Courts consider that, though the invention was apparently small, yet the result being the difference between failure and success, it is fit subject-matter. Thus, the mere placing of two flat wicks parallel to each other in an oil lamp,. two concentric round wicks having been previously combined, and fiat wicks being perfectly well known, has been held sufficient to merit a patent;

31. The authority cited is Hinks & Son v. Safety Lighting Co. (1876) 4 Ch. D. 607. In that case Jessel M. Rule makes the following observation (p. 615):

> Where a slight alteration in a combination turns that which was practically useless before into that which is very useful and very important, Judges have considered that, though the invention was small, yet the result was so great as fairly to be the subject of a patent; and, as far as a rough test goes, 1 know of no better.

32. In patent cases the Courts attach great importance to the fact that the alleged invention was only arrived at by a series of experiments. The learned Judge at p. 64 of the paper book has referred to this principle and has cited an authority in support of it. It is beyond dispute that the plaintiff carried on numerous experiments from 1924 to 1930.

33. The rule as to application of old contrivances to analogous purpose does not necessarily apply to cases of chemical invention (see Badische A nilin und Soda Fabrik v. Levinstein(1887) 12 App. Cas 710, 723. It is in evidence that when, previously, bleaching was done with sulphur fumes, the fruit was yellow and the flavour was wanting. Even when the plaintiff tried his first process in April, 1930, and succeeded in obtaining white colour, the process was found to be a failure, and the almonds sold by Harakchand Shivji & Co. were returned by merchants to them, after some months. That the attention of the dealers was directed to an improved method is undoubted. It was for that purpose that Jarivalla Shah & Co. opened a laboratory and engaged Dr. Patel to experiment: on it, and Girdharlal asked him to find out a process, among other things, relating to almonds of which there was a great demand. It is equally clear on the evidence that there was a demand for this kind of fruit at least since 1928, and as soon as whitened almonds appeared in the market they fetched a higher price and people began to deal in them. Then, although Dr. Patel decries plaintiff's invention, he had to admit that his experiments, which were no less than about twenty-six, even on pepper, did not produce satisfactory results, and his process was a failure. He had further to admit, though at first he asserted that this particular method was in trade books, that as far as books went there was nothing in them about the combination of bleaching powder and SO2 in the case of dried fruits. He admitted that the idea of using pressure had not occurred to him or to anybody else, nor did the application of sulphur dioxide. With these facts, therefore, before me I have no difficulty in holding that the two features which are necessary for the validity for the patent, namely, novelty and utility,

are there in the plaintiff's process and that it was a new invention unless the defects specified in Section 38 of the Indian Patents and Designs Act are present. I shall consider that question presently.

34. The second issue is : Whether the plaintiff is the true and first inventor of the said process? Now the actual finding of the learned Judge on this issue is " not necessary " ; but he has examined the evidence and arrived at a conclusion, which, with the utmost respect to him, I am unable to follow. This is what he says :

> If the refinements which he (plaintiff) introduced in his process were really an essential part of it he must be held on the evidence to be the first inventor. But if Dr. Patel's evidence is true, and I am not prepared to disbelieve it, he was the first to bleach almonds by the combined use of bleaching powder and sulphur dioxide. His process was the same in principle as plaintiff's. It only needed modifications and developments such as any skilled tradesman could supply. In all essential features, therefore, it anticipated plaintiff's process.

35. If I am right in holding what the learned Judge calls the refinements of the plaintiff are an invention, then, even according to the learned Judge, it follows that the plaintiff was the true and first inventor. Apart from this, the only material witness on this part of the case is Dr. Patel. Now apparently, there is no love lost: between the plaintiff and Dr. Patel. According to the plaintiff he was dismissed, according to Dr. Patel he resigned as there was a dispute between them. The matter was then taken to Courts. It is necessary to bear this in mind in appraising Dr. Patel's evidence. The gist of his evidence is as follows. At p. 69 of the paper book it is summarised by the learned Judge:

> He says that bleaching almonds was one of the problems given him to solve when he was in charge of the manufacturing department of J.S. and Company, that he made twenty-five or thirty experiments and that he discovered a process, which according to him was satisfactory on a laboratory scale, combining the use of bleaching powder, muriatic acid and sulphur dioxide. He says that he generated the sulphur dioxide both by chemical action and by burning sulphur, but the sulphur oven which he describes would not enable the gas to be applied under pressure, and would in fact be similar to the old method of burning in signs. He admits that he has not made any experiments. as to the effects of pressure or different pressures. He says that he kept general notes of successful experiments in a book which he left behind in the laboratory when he handed over charge. This book apparently is not now forthcoming. At any rate it has not been produced. He also says that he produced samples of bleached almonds which he gave to Girdharlal for being shown to merchants.
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> Then, as to bleaching, his evidence is that he used bleaching powder or chlorine, and admittedly his treatment of pepper was a failure. Then he conceded that his were laboratory experiments and not at all on a commercial scale, and that makes considerable difference to the case. I am also unable to accept the case put forward by

the defendant in this respect that he obtained samples from Dr. Patel. According to Dr. Patel, he gave these samples to Girdharlal. He was admittedly engaged to find out a process for almonds. Girdharlal and Jarivalla Shah & Co. were anxious to put these almonds on the market. It is difficult to understand, therefore, that if Dr. Patel's treatment was a success and the samples were perfect, why from 1929 till about the middle of 1931 neither Jarivalla Shah & Co. nor Girdharlal nor anybody else attempted to use Dr. Patel's-process and to put on the market almonds treated with that process. It is also difficult to understand, if Dr. Patel's story is true, why Harakchand Shivji & Co., who were one of the best dealers in this trade and who were anxious to have a process of this kind and who approached the plaintiff when he returned from Europe, were not informed that Dr. Patel had already discovered this process, that it was a successful process, and that Dr. Patel had given samples to Girdharlal. Anyway it was necessary for the plaintiff to start his experiments right from the beginning and carry on for a period of a year and a half. Then the correspondence which passed between the plaintiff and the defendant gives a complete lie to this story. Until this case started it was never-alleged by Girdharlal that Dr. Patel had discovered any process. In the correspondence which was carried on during plaintiff's absence in Europe,. Girdharlal never mentioned that Dr. Patel had invented a process for treating almonds. Then in his solicitors' letter of June 7, 1932,. Girdharlal's case was that the process was invented by him and the plaintiff. Further, when after some experiments the plaintiff succeeded in obtaining a tentative process, and according to the defendant or Girdharlal Harakchand Shivji & Co. were paying Rs. 300 to the firm for this and when after some months it was found that that process was a failure, why did Girdharlal not employ the method of Dr. Patel? On this part of the case the learned Judge has refused to accept the evidence of Girdharlal, and with that I agree.

36. This brings me to the notes of Dr. Patel. He stated that while experimenting he prepared some notes. At the trial those notes were not forthcoming, and subsequently the plaintiff discovered them, and applied to the learned Judge for review of judgment, the plaintiff's contention being that what Dr. Patel stated that he had tried his process on almonds was not correct. That application was rejected by the learned Judge, and the matter need not be pursued any further. But assuming Dr. Patel had discovered this process, it was clear on the evidence that he never made it public. There is no evidence that he took Girdharlal in his confidence or told him what the process was. What happened was that he discovered and gave samples of almonds to Girdharlal, and nothing further happened. Then the position in law would be that if the same process was discovered by the plaintiff and he applied for patent, he would be the first inventor. That, I think, is clear from Dollond's case.(1766) I Web P.C. 43. In that case the objection to the patent was that Dollond was not the inventor of the method in question and one Dr. Hall had made the same discovery before him. It was held that inasmuch as Dr. Hall had not made it public, and the public were not acquainted with it, Dollond was the first inventor. I may also refer to the evidence of two chemists with at least the same qualifications as those of Dr. Patel, who were examined on behalf of the plaintiff, and who candidly admitted that to them the plaintiff's process was an invention. Finally, I may refer to Varmani's admissions that the process was not known before the plaintiff actually discovered it. I

must, therefore, answer the second issue in the affirmative.

37. And this brings me to the third and perhaps the most important issue in the case. The issue as originally raised by the defendant was in these terms:

> Whether the process and other matters in respect of which the plaintiff claim rights as a patentee were publicly used prior to the issue of the patent by the firm of Jarivalla Shah and Company?

38. It is clear that that issue was raised on his pleading and the particulars on which he relies as set forth in para. 3 of the written statement. His case was that there was a public user of the invention by the firm of Jarivalla Shah & Co., which, it would be remembered, consisted of the plaintiff and Girdharlal. Then what happened was that after the plaintiff had closed his case, counsel for the defendant applied for leave to amend; the issue. That was objected to, but the objection was overruled, and the amended issue sets up the case that there was a public user not only by the firm but also by other persons. No application for the amendment of the written statement was made and no particulars were given as to the persons alleged to have used the invention in public. The actual finding of the learned Judge on the question of public user by the firm of Jarivalla Shah & Co. is in the negative. But he has found (a) public user by the plaintiff himself, and (b) by other people to whom I shall refer presently. Now the Court undoubtedly has a discretion to allow an amendment of the pleadings or the issues or to raise fresh issues at any stage of the case. But, if the course to be taken is not fair to the party against whom it is to be taken, or would take him by surprise, then, obviously, the Court ought to have given him a proper opportunity to meet the new case. With great respect to the learned Judge, in my opinion, the issue at that particular stage should not have been amended. But if it was felt that in the interests of justice it was necessary, the Court should have directed the defendant to give particulars. In a patent case the necessity of proper particulars is all the greater. Formerly, in England, the Patent Act of 1835 specifically required the delivery of the particulars of the objection by the defendant to the plaintiff, and so also the Act of 1883 ; and now the Rules of the Supreme Court provide for the same. Order VI, Rule 4, of the Civil Procedure Code, specifically lays down the same principle.

39. Taking the original issue and the findings on it, the matter seems to me to be at an end. But the learned Judge has found on the amended issue that there was a prior user by the plaintiff and by other persons. It is argued that the firm of Jarivalla Shah & Co. means the plaintiff. Legally the argument is unsound. The firm, which originally consisted of the plaintiff and Girdharlal was dissolved and came to an end in October-November, 1930. Taking the latter part of the issue as amended, the finding on it is as follows:-

> There was a public user of the process by the plaintiff himself and of substantially the same process by other merchants prior to the application for the patent.

40. It seems to me to be difficult to accept this finding. The finding is not that the process patented was used in public, but that the process used in public was substantially the same as the process patented. This, I venture to think, is not enough under the law to destroy the plaintiff's claim.

41. Now, the fundamental principle underlying the doctrine of public user is that the patentee could not give any consideration to the public for the grant nor does he add to the knowledge of the public, if the invention which he claims to be new was either known to the public or used in public before the application for the patent, that is if the public already possessed everything that he could give: Patterson v. Gas, Light and Coke Company.(1877) App Cas 239, 244. What is necessary to be proved, therefore, is that the prior user was public. Public use does not mean use by the public, but use in a public manner and not secretly, I want to stress the last words. That, I think, is the principle underlying Section 38 of the Act. Sub-section (1) of Section 38 is in these terms:-

> 38(1) An invention shall be deemed a new invention within the meaning of this Act-
>
> (a) if it has not, before the date of the application for a patent thereon, been publicly used in any part of British India, or been made publicly known in any part of British India, and
>
> (b) if the inventor has not by secret or experimental user made direct or indirect profits from his invention in excess of such an amount as the Court or the Governor General in Council, as the case may be, may, in consideration of all the circumstances of the case, deem reasonable.

42. Before the present Act there was Act V of 1888, and Sections 21, 22 and 23 dealt with this subject. On a comparison of the two statutes, it will be seen that the present Section 38 (1)(a) and Sub-section (2) of that section are the same as Sections 21 to 23 of Act V of 1888. Clause (b) of Sub-section (1) of Section 38 was added by the Act of 1911 as amended, and it was not in the old Act.

43. This clause, therefore, introduces a fresh condition to allow secret or experimental user without affecting the novelty of the invention.

44. Now the public user which would invalidate an invention or rather on account of which an invention shall not be treated as a new invention, must be the use of the invention in public. The invention in this case is the process as described in the specification. Therefore, the finding that the merchants were using substantially the same process is, in my opinion, inadequate. But assuming that the finding is, and that is the defendant's case, that the same process was used and the same kinds of articles were turned out, what is the position? The public user alleged is by some merchants who have been examined on behalf of the defendant. We have considered their evidence carefully since the learned Judge has accepted it. In the first place, admittedly, they were interested witnesses. One of them admitted that they wanted the suit to be dismissed. Secondly, the evidence as to details is discrepant and not satisfactory. Thirdly, the alleged prior user commenced, as the learned Judge has found, in some cases, at the earliest in March, 1931, and that the story seems to me to be inherently improbable. It is clear on the evidence that Varmani who alone knew the plaintiff's process was got hold of by the defendant and Girdharlal sometime in the middle of 1931, and they began to use the plaintiff's process with Var-mani's help in about October, 1931. Apart from all this, even if the whole of their evidence is accepted, it does not show at all that the invention, that is, the process patented, was used by them at all. Nor does it appear that their almonds were similar

to those of the plaintiff. The process described by them is quite different from that described in the specification of the plaintiff, and I have no difficulty in holding that, as far as these merchants are concerned, the case of the alleged prior user by them is not established.

45. This brings me to the prior public user by the plaintiff himself, and it is here that Section 38 would apply. The learned Judge was of opinion that this section was not applicable, but I venture respectfully to differ from him. I am of course now treating the firm of Jarivalla Shah & Co. in the issue as meaning the plaintiff himself. What are the facts? When Harakchand Shivji & Co. approached the plaintiff and asked him to experiment for discovering a process which would whiten the almonds without affecting their quality or flavour, and they agreed to pay him Rs. 300 per month, the plaintiff went on experimenting. These experiments or the greater part of them were carried on in his laboratory in the first instance, and in March or April, 1930, he produced a tentative rocess. That was tried in the factory by the plaintiff himself, and the almonds treated by means of this process were returned to Harakchand Shivji & Co. after some months. Thereupon his payment was stopped. The plaintiff again started experimenting in November, 1930, and Harakchand Shivji & Co. went on paying him the same remuneration. The plaintiff succeeded in discovering the present process finally at the end of February, 1931. He then used this process himself on the goods supplied by Harakchand Shivji & Co. which undoubtedly were sold by the latter. This went on till October, 1931, when it was discovered that his process was used by the defendant, and owing to a competition, Harakchand Shivji & Co. could not make any profit, and thereupon they stopped his remuneration. Now the learned Judge has held, and I think rightly, that the period up to November, 1930, must be ex-eluded. But, I think, the learned Judge was prepared to go further and hold that up to February, 1931, there was no public user by the plaintiff. But he holds that between March and July, 1931, when the plaintiff applied for a patent he used his invention in public and produced almonds which Harakchand Shivji & Co. sold to the merchants and thereby made a profit. Therefore, the simple question which arises is, whether payments to the plaintiff by Harakchand Shivji & Co. between March and July, 1931, or the sale by Harakchand Shivji & Co. of the almonds produced by the plaintiff after an application for the patent amounts to public user within the meaning of Section 38 of the Act.

46. The learned Judge held that even if this user was secret, the authorities to which he has referred would show that it would invalidate the patent. With great respect I am unable to agree. First, as to the plaintiff's remuneration of Rs. 300 per month. Unfortunately, in the absence of a proper issue, the evidence as to the exact agreement or arrangement between the plaintiff and Harakchand Shivji & Co. is not available. But such as it is, it suggests that the plaintiff was to use his process himself of course with the help of the workmen and turn out polished almonds and hand them over to Harakchand Shivji & Co. who were to sell the same and keep the profits to themselves. It further suggests that the agreement was not for a fixed period, because as soon as Harakchand Shivji & Co. made a loss in the business, they stopped the remuneration of the plaintiff, and, secondly, as soon as they discovered that there was a competition, they again stopped the plaintiff's remuneration. What is important to note is that the process as such was not sold to Harakchand Shivji & Co. In my opinion, this would be a secret user of the process by the plaintiff, and if I am right in this, then Section 38(l)(b) would at once come in, and it would raise the question whether the profit made by the plaintiff was unreasonable. There was no pleading to this effect, no issue and no evidence, and, I

think this is one of the complications introduced in the case by reason of the amendment of the issue, which the plaintiff had never any opportunity to meet. If the defendant had said that the plaintiff used this process for profit or commercially, the latter could have pleaded that it was not a public user but a secret user. I think he might also have contended that it was an experimental user for profit, which under Section 38 is allowed and does not vitiate the invention. When the plaintiff discovered his first process and tried it, it was realised after three or four months that it was a failure. It must take some time whether the almonds turned out would keep the colour or the flavour and it would be at least arguable that, the user during this period was experimental. If so, it is difficult to see why the user from March, 1931, up to July, 1931, was not experimental. In any event the question would be arguable. The issue then would have been, whether, in view of his agreement with Harakchand Shivji & Co., the mere fact that the plaintiff was supervising the factory and turning out almonds by application of his process in secret amounted to a public or secret or experimental user.

47. The cases on the subject of secret user are conflicting, and this branch of the subject bristles with many difficulties. As Frost points out in his book on Patent Law and Practice, 4th Edn., Vol. I, at p. 122:

> Apart from experimental user it is to be observed that it is competent for a person himself before the date of a patent to use the invention, the subject of the grant, in either or both of two ways. First, he may use it openly in such a manner that the user will convey to the mind of any one seeing it a knowledge of what the invention consists, e.g., if the alleged invention relate to the particular construction of a lock, any person who has before the date of the patent so constructed a lock, and publicly used it in this country so as to exhibit the construction, will thereby have published the invention, and any subsequent patent for it could not be sustained. Secondly, the inventor may so use his invention that the user will not enable any one seeing it to discover in what the invention really consists-e. g., in the case of a chemical invention, a dye for instance, the dye might be produced and known, but the existence of it would not demonstrate the method, according to which it was prepared, and no person other than the manufacturer in possession of the secret would be able to produce it-in such a case it is submitted, for reasons which will appear hereafter, that such a user would not prevent the manufacturer, though it might prevent another person who should discover the secret, from obtaining a patent for the invention valid on the ground of novelty.

48. The same learned author further observes (p. 127):

> If an inventor manufacture and offer for sale an article made in accordance with his invention before the date of his patent, even though no sale actually take place, he will thereby, if the nature of the invention can be understood from an inspection of the article, publish his invention and deprive himself of any right to become a patentee in respect of it.

49. Then the author goes on to say (p. 128):

> But if the article does not on the face of it show the manner in which it was made, it may be doubted whether such a manufacture and offering for sale by the inventor himself would deprive him of his right to a subsequent patent for the process of manufacture, and the bare fact of the article having been made before the patent was obtained would not alone render it bad.

50. Mr. Khan relies on some English cases and on In the matter of the Inventions and Designs Act, (1896) I.L.R. 23 Cal. 702, which follows them. The Calcutta case was decided under the old Act of 18S8. The distinction now made by the present Act between public user and secret or experimental user on a reasonable remuneration or profit was not to be found in the old Act. Apart from that, I am, with all respect to the learned Judge in that case, unable to agree with his opinion. He relied upon an observation of Lord Campbell C.J. in Heath v. Smith (1854) 2 Web. P.C. 268, 278 : S.C. 3 EI. & BI. 256, which was an obiter dictum. Then the observation must, as pointed out by Frost, be assumed from the context to refer to a user by a person other than a patentee. Lord Campbell seems to have proceeded upon the ground that a sale of an article produced by an invention if allowed would result in securing for the patentee a longer monopoly than the law allows. That opinion, as Frost points out, ignores the distinction between a public user enabling the public to practise the invention for themselves, and the secret user by the patentee himself in such a way that the consideration which a patentee has to give for his patent is not in the least affected. If the manner in which the patentee uses his invention for a limited period is such that it does not make the public or any one else the wiser, then it is difficult to see why even if he derives profit thereby he has not kept his bargain with the Crown or the public In fact Section 38(1)(6) clearly contemplates the distinction in the case of this nature. It is difficult to see why there is no consideration for the Crown at any time prior to a discovery of the invention to the public and prior to the patentee enabling the public to practise the invention for themselves. The decisions in England seem to show that where there has been no more than a secret use of the invention by the inventor with a view to taking out a patent or the manufacture for the inventor and under injunctions as to secrecy by a manufacturer, the patent will be good. But this will not be the case where the secret process has been used for profit or where the invention was communicated to a third person in a manner which both in law and in equity allowed him to do what he liked with the invention. Heath v. Smith and Wood v. Zimmer seem to proceed on the latter principle. Section 38 of our statute allows a secret user for a reasonable profit.

51. As regards the user by Harakchand Shivji & Co. there is no evidence that they knew what the process was. What is necessary to prove is that Harakchand Shivji & Co. came to know the invention and used it themselves and knew what it was. This has not been done. As a matter of fact the evidence shows that nobody knew what the plaintiff's process was until the middle of 1931, when the defendant got hold of Varmani who knew it, and who worked the process in his factory for a remuneration.

52. In the course of the argument it was suggested that Varmani knew the process and so did the workmen who worked in the factory. As regards Varmani there was no issue and no finding. There is no evidence that Varmani used the process himself until October, 1931, that is, long after the period

from which the patent came into force. The communication to Varmani may amount to publication, but that was not pleaded. If it had been, I do not see why the plaintiff should not have relied on Sub-section (2) of Section 38. Speaking for myself, Varmani came to know of the process confidentially, and there is no doubt he betrayed his confidence. Whether it would be a fraud or not would be a question which could only have been gone into on proper pleadings and evidence. But, in my opinion, it was a breach of confidence. The same remarks apply to the case of samples. In the first place, having regard to the nature of the process and the class of persons who would be employed as workmen and the class to which they belonged, I doubt whether they would be able to know this particular chemical process. But, if they knew it, that would be publication and not a prior user, and that is not pleaded.

53. The only other issue is issue No. 4, which seems to me to be vague. But the learned Judge has answered it in favour of the plaintiff for the same reasons for which he answered issues Nos. 1 and 2, and the issue really covers the same ground.

54. The remaining issue is issue No. 5. The actual finding on it is "not necessary". The learned Judge has, however, examined the evidence and held that if the other issues had been decided in favour of the plaintiff, he would have answered this issue in the affirmative. I have no doubt that it ought to be answered in the affirmative on the, evidence. The evidence shows that Varmani gave to the defendant the process which he had learned from the plaintiff.

55. I agree, therefore, that the appeal must be allowed with costs.