



Vitro Corp. v. Hall Chemical Co.

254 F.2d 787 (1958) | Cited 5 times | Sixth Circuit | April 19, 1958

Before SIMONS, Chief Judge, and ALLEN and MILLER, Circuit Judges.

ALLEN, Circuit Judge.

This case arises out of an action for declaratory judgment instituted by the Vitro Corporation of America, appellant, hereinafter called Vitro, against The Hall Chemical Company and James D. Hall, hereinafter called Hall.

Hall filed an answer and counterclaim praying for an accounting and injunction against the use by Vitro of certain processes alleged to have been originated by Hall and disclosed in confidence to Vitro. Later Hall filed a supplemental counterclaim charging Vitro with infringement of U.S. Letters Patent No. 2,716,588 issued to Hall on August 30, 1955. At the trial Hall withdrew this charge and no question upon that subject is presented in this appeal. The District Court impounded and preserved in camera the transcript, exhibits and various memoranda of the parties to avoid disclosure of Hall's claimed secret processes. The charge of bad faith and unclean hands raised by Hall against Vitro in the counterclaim was found by the court not to be supported by the evidence. However, the court filed detailed findings of fact and conclusions of law in general in favor of Hall, dismissed the complaint, issued an injunction forbidding any further use by Vitro of information as to Hall's recovery process, and ordered an accounting for damages sustained.

Two questions are presented in this court: (1) Is Hall estopped from asserting rights under the nondisclosure contract of October 21, 1953, or otherwise, with respect to the disclosure of separation procedures? (2) Should the judgment for injunction and accounting be set aside on the ground that the court below failed to make the findings necessary to support such judgment?

The case arises out of the following facts: Vitro for a number of years has engaged in the recovery of metal salts by hydro-metallurgical processes. It owns and operates several plants, including a refining plant at Canonsburg, Pennsylvania, which was used in 1953 for the reclamation of uranium from uranium fuels under contract with the Atomic Energy Commission. In August, 1953, Vitro learned that the AEC contract would not be renewed and therefore sought to find other employment for the facilities at Canonsburg. It decided to look into the possibility of reclaiming metals from alloys such as S-816 used in the jet engine field and left over from the Korean War. S-816 is a high temperature alloy high in cobalt and nickel and containing columbium, and lesser amounts of chromium, manganese and iron. In August, 1953, Vitro started a laboratory program for the use of its facilities at Canonsburg in the recovery of cobalt and nickel from S-816 and designated certain



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chemists to find a commercial process for this purpose. Vitro was interested principally in two problems: (1) the possibility of dissolving large chunks of S-816 alloy fast enough to secure a commercially feasible process. While chips and grindings dissolved readily in strong acid, the massive scrap presented particular difficulty, the rate of dissolution being so slow as not to be economically practicable. (2) Vitro was also greatly interested, as stated by its chemist Summers, in certain problems of the recovery of the component metals from the alloy. The high chromium content of the alloy was noted in Vitro's report on laboratory tests of its Industrial Refining Division, August 28 to September 4, as being a possible source of "contamination of the cobalt product."¹ If, while the chromium remains in solution the cobalt in the alloy is precipitated, the cobalt, which is the most valuable metal in S-816, is contaminated by the chromium. A 2.0% contamination of cobalt from chromium was recorded in the Vitro laboratory reports of September 25 to October 2. Chromium is difficult to separate by precipitation. Also, iron, manganese and cobalt, all contained in S-816, require oxidization of the liquid before they can be precipitated and recovered but the oxidization of these metals while chromium is present prevents precipitation of the chromium, which is separated in a reduced form. Therefore the recovery of the metallic components of the alloy presented difficult problems, many of which were fully appreciated by Vitro's chemist Summers in October, 1953.

In its investigation of possible processes for refining the S-816 alloy from scrap, Vitro's president interviewed the Assistant Secretary of Defense of the United States in Washington and there learned that The Hall Chemical Company of Cleveland was refining this particular scrap. Vitro's president named no other organization as having been mentioned in Washington. Accordingly he suggested that his executive vice president White "approach The Hall Company." That the approach was made by Vitro and the purpose of it are shown by Vitro's regular weekly report of its Industrial Refining Division of the week ending September 11, 1953. This report stated: "Arrangements were made to visit The Hall Chemical Company during the coming week to explore the possibility of licensing their cobalt process."

After telephoning Hall at Bermuda for an appointment white and other Vitro employees visited Hall's place of business in Wickliffe, Ohio, for some three hours. The plant was not in operation but Hall took the Vitro people through the building, showed them his equipment, and made certain explanations. On October 13 and 14, Hall, his attorney and his accountant came to New York and conferred with Vitro as to the possibility of Vitro's securing a license on the Hall process or making other business arrangements for using Hall's system. Vitro asked to be allowed to make an extensive study of the Hall procedures and also asked that the details of the Hall recovery process be more completely disclosed. Hall's lawyer suggested that a nondisclosure agreement be executed by Vitro. Such an agreement was drawn up by attorneys for both parties and executed on October 21, 1953, during the New York meeting. It reads as follows:

"So that you and representatives of your company and ours may discuss technical information which you have available as to scrap metal recovery processes, presently in commercial use by The Hall



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Chemical Company, confidential and secret in nature, we agree, in consideration of disclosures to us of such technical and operative information relating to scrap metal recovery processes, to keep confidential the information so imparted to us and not to make use of it until it becomes publicly known other than by an act or omission on our part".

Immediately after this agreement had been executed the Vitro chemists went to Hall's Wickliffe plant for a week and Hall fully disclosed his process for dissolving the S-816 scrap and also every step in recovery of the metal salts of S-816 used by him, including not only the order of separation of the various metals, the use of reagents, but also the complete details of Hall's control of temperatures, dilution and regulation of pH (that is, degree of acidity and alkalinity). As Summers testified, the recovery operation was of great interest to Vitro for two reasons:

"One, we know of no method to precipitate crystalline precipitate of chromium hydroxide, or any hydroxide and, second, the precipitation of chromium and iron and manganese are chemically opposed. The chromium is separated in what we call a reduced form, the iron and manganese are separated under oxidized conditions, and in the case of manganese heavily oxidized conditions, and under these conditions chrome will go into solution as sodium chromate."

Hall's chemical expert testified that Hall solved these two problems in which Vitro was particularly interested. He avoided oxidation of the liquid by the use of sulphur dioxide as a reagent. Before the extensive conferences with Hall at the plant Vitro, as shown by its prospective flow sheet (Plaintiff's Ex. 9), did not contemplate the precipitation of chrome. The chrome was simply kept in solution and dumped out. Hall precipitated the chrome as a hydroxide before the recovery of the cobalt, thus eliminating the problem of chromium contamination. Vitro took over from Hall his entire method of separation of chrome and also now secures the separation of cobalt under closely controlled conditions of pH and temperatures very similar to Hall's. Vitro's prospective flow sheet (Plaintiff's Ex. 9) drawn by Summers contained no descriptions of the necessary controlled conditions of pH and temperature. Vitro obtained them from Hall. The closely controlled conditions employed by Hall were described by him in detail and notes were taken on them by Summers before the new process (Defendant's Ex. 5) was copied by Vitro. Hall's chemical expert testified that Vitro's present process of extracting the cobalt precipitate is very similar to Hall's; that the problem was very uncommon because of "high chrome, high cobalt"; and that he knew of no such process as Hall's any place else.

Subsequent to the extensive disclosure of October 22-27, 1953, Vitro decided not to take a license on the Hall process nor to enter into any deal with Hall. Vitro gave Hall notice of this decision in February, 1954. Thereafter Vitro practiced the Hall process with slight variations in the recovery of cobalt and nickel from S-816. This was claimed by Hall to violate the nondisclosure agreement of October 21, 1953, and Vitro's action for declaratory judgment ensued.

The District Court found in substance that Hall's processes, methods and knowhow of the commercial recovery of metal salts from metal scrap were "invented and developed" by Hall; were



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disclosed to Vitro in confidence; were not disclosed in the prospective process worked out in Vitro's laboratory prior to the disclosures by Hall; were not disclosed in the prior art relied on by Vitro; were considered by the parties to be part of the recovery process "confidential and secret in nature" which Vitro agreed, in the contract of October 21, 1953, to hold confidential and not to use; and that the trade secrets of Hall's recovery process were used by Vitro to the injury of Hall.

While with reference to most of the nineteen paragraphs of the District Court's findings Vitro does not specifically contend that no evidence is adduced in support thereof, it attacks the court's factual decisions so sharply that it is essential to point out its contentions in some detail. Vitro asserts that the nondisclosure agreement relates only to the digestion process of dissolving the "massive scrap" and not to the recovery of the metals in the alloy. It therefore claims that Vitro cannot be held liable for use of Hall's recovery processes.

The contract of October 21, 1953, expressly refers to technical information which Hall may make available as to "scrap metal recovery processes, presently in commercial use by The Hall Chemical Company." The agreement then continues that in consideration of disclosures of technical and operative information relating to "scrap metal recovery processes" Vitro will neither disclose nor use such information. The scrap metal recovery process, as testified by witnesses for Hall and as found by the District Court, includes the entire method of recovery of metals from S-816 and not the mere dissolution of massive scrap. The digestion step is an all-important preliminary to the recovery of the metals, which is the end purpose of the process.

Vitro next claims that Hall at no time stated that his recovery processes were secret, that Hall on September 17, 1953, emphasized that he had a secret process for the quick digestion of large chunks of scrap which he was unwilling to disclose because of pending patent applications on this feature of his process.² It urges that Hall voluntarily disclosed his separation process to Vitro on September 17. Vitro says that Hall allowed Vitro, on September 17, before the nondisclosure contract was executed, a complete inspection of his plant and its facilities, described the separation steps and stated that these steps were carried out by "standard" and "conventional" processes, in other words, that they were old in the art.

Employees of Vitro assert that Hall did not state that the separation processes were secret or confidential and thus Vitro contends that Hall misled Vitro as to the subject of the nondisclosure contract.

Hall denied that he said that his recovery process was accomplished by "conventional" means, or that he said his separation methods were "standard." He testified that he said his processes could be conducted with "standard equipment."

The meeting of Vitro and Hall on September 17 at the Wickliffe plant lasted three hours. The plant was not in operation. Hall said that he spoke about the separation steps in general terms and tried to



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disclose nothing about the process at that time as "The whole business was secret." Summers, Vitro's chemist, testified that no one told him that anything learned in the business was not confidential. A controverted question of fact is thus presented as to whether Hall voluntarily disclosed his separation process and declared that it was not confidential. The findings of the District Court upon these features of the case necessarily control.

After the execution of the nondisclosure contract Summers made a six-day study of Hall's whole plant and process from October 22 to October 27, 1953, taking numerous samples, taking notes of the exact temperatures used, the order in which the various metals were separated, the order in which the reagents were added, the control of the pH of the liquid. Vitro contends that the purpose of this detailed examination was to secure a "material balance" test by measuring in pounds and gallons the scrap and chemicals inserted in the tanks and the products and by-products produced. But the meticulous detail of the examination as to control of pH and temperatures was unnecessary for such a purpose. Also Vitro's Industrial Refining Division operating report of October 30, 1953, shows that Vitro understood that in this extensive examination its purpose was to secure data on the Hall process of recovery. This report, introduced in evidence, states that Vitro made a visit to the Hall Chemical Company "to investigate and evaluate the production process for the recovery of Cobalt and Nickel" and also "to study the chemical process now in use at this plant. A complete description of procedure, equipment, etc. was obtained."

Vitro next claims that as a result of the extended tests it found that Hall's process was not commercially feasible. Around the starting of the examination of October 22-27 at the Hall plant Summers drew up a flow sheet (Plaintiff's Ex. 9), giving what he called Vitro's "best thinking" as to a "Prospective process for the refining of S-816 alloy." It called for the separation of cobalt while chromium remained in solution and thus continued to contaminate the cobalt. Later in the week Summers, under the guidance and with the help of Hall, drew another flow sheet (Plaintiff's Ex. 5). In this flow sheet the chromium was precipitated first as disclosed by Hall and cobalt, the most valuable of the metals in solution, was separated substantially by the Hall process. After the full disclosure at the Hall plant and its decision not to make a deal with Hall, Vitro used with slight variations the process disclosed on flow sheet (Plaintiff's Ex. 5) as shown by its own flow sheet (Plaintiff's Ex. 8), and did not use the disclosure on its own flow sheet (Plaintiff's Ex. 9) previously drawn up by Summers. The contention that Hall had a process not commercially feasible is strongly refuted by Vitro's adoption of Hall's principal features.

The proof that the Hall process solved both the critical problems of digestion and of noncontamination of the cobalt is undisputed. Hall avoided oxidation of the liquid, thus securing precipitation of the chromium before the separation of the cobalt and nickel. Also by a particular combination of detailed controls of temperature and pH Hall produced a crystalline precipitate of chromium which is easily filtered. Vitro, since shortly after October 27, 1953, in the process it has used for recovery of cobalt has substantially copied Hall, both in avoiding oxidation in precipitating the chromium before the cobalt and in using temperatures and pH very close to those used by Hall.



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All of the long and careful experimentation by Hall involved the employment of difficult and complex chemical factors. While the general theory of the separation of metals was old in the art, this record fails to show that, as applied to the separation of metals from S-816 scrap, Hall's precise solution has else-where been achieved. As found by the District Court:

"11. In the plaintiff's commercial process illustrated by plaintiff's Ex. 8 and defendant's Ex. P, plaintiff departed from its 'prospective process' illustrated in plaintiff's Ex. 9 and followed instead the disclosures it had received in confidence from defendants, particularly

"(a) in forming, in the recovery of metal compounds from metal scrap containing cobalt, nickel and chromium, the type of chromium ions formed by the process disclosed by defendants and in removing the chromium compounds at the same stage relative to the removal of nickel and cobalt;

"(b) in using substantially the same steps and procedures disclosed by defendants in the removal of chromium compounds; and

"(c) in using substantially the same steps and procedures disclosed by defendants in the removal of cobalt compounds.

"12. In each of these three particulars the plaintiff's commercial process is not disclosed in the 'prospective process' of the flow sheet plaintiff's Ex. 9, is not disclosed in the literature referred to by plaintiff as having been available to it prior to its [contract] with defendants, and is substantially identical to the confidential disclosures made by defendants to plaintiff. The differences in detail between plaintiff's process and defendant's confidential disclosures in these particulars, including the cobalt separation in two steps instead of one, are immaterial variations which do not substantially affect the operations and results and do not reflect a departure by plaintiff from the substance of defendants' confidential disclosures."

The findings of the District Court are findings of fact. They are sustained not only by substantial evidence, but in general by both plaintiff's and defendants' witnesses. Hence they must be accepted here. *Corey v. Atlas Coal & Coke Co.*, 6 Cir., 277 F. 138; *Templar Motors Co. v. Bay State Pump Co.*, 6 Cir., 289 F. 24; *Hathaway v. First National Bank of Cambridge*, 134 U.S. 494, 10 S. Ct. 608, 33 L. Ed. 1004. Cf. *Law v. United States*, 266 U.S. 494, 45 S. Ct. 175, 69 L. Ed. 401; *Canadian National R. Co. v. George M. Jones Co.*, 6 Cir., 27 F.2d 240, 243.

Vitro also contends that the judgment is not supported by the findings, relying on *Reynolds Metals Co. v. Skinner*, 6 Cir., 166 F.2d 66, 76, certiorari denied 334 U.S. 858, 68 S. Ct. 1528, 92 L. Ed. 1778. That case declared that parties claiming rights under alleged trade secrets "must have conceived, invented or developed the devices or processes in order to be entitled to compensation for their use." The finding of the District Court that the trade secrets here involved were invented and developed by Hall is equivalent to the finding required in *Reynolds Metals Co. v. Skinner*, supra.



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Neither is the judgment invalidated by the fact that Hall made his discoveries by experimentation, dubbed by Vitro "routine chemical procedure." The problem of recovery of metals from the high temperature alloy S-816 was a particular problem. No one but Hall had produced the precise combination of order of recovery of the metals, of control of temperatures, pH, etc., that were worked out in these processes which, as the court rightly held, were disclosed in confidence to Vitro.

The fact that Hall's trade secrets could have been discovered just as he discovered them, by extensive and painstaking experimentation, which led from known factors to an ascertainable result, does not destroy the value of the discovery nor eliminate the liability of Vitro. *Herold v. Herold China & Pottery Company*, 6 Cir., 257 F. 911; *A. O. Smith Corporation v. Petroleum Iron Works Company of Ohio*, 6, Cir., 73 F.2d 531, 538, 539; *Smith v. Dravo Corporation*, 7 Cir., 203 F.2d 369, 375; *Franke v. Wiltschek*, 2 Cir., 209 F.2d 493, 495. Cf. *Colgate-Palmolive Co. v. Carter Products, Inc.*, 4 Cir., 230 F.2d 855, 863. In the *Franke* case the Court of Appeals for the Second Circuit declared [209 F.2d 495]:

"Defendants argue that the heart of plaintiffs' process was revealed by an expired patent, and that the improvements thereon were unpatentable applications of mechanical skill. This totally misconceives the nature of plaintiffs' right. * * * Theirs is not a patent, but a trade secret. The essence of their action is not infringement, but breach of faith. It matters not that defendants could have gained their knowledge from a study of the expired patent and plaintiffs' publicly marketed product. The fact is that they did not. Instead they gained it from plaintiffs via their confidential relationship, and in so doing incurred a duty not to use it to plaintiffs' detriment.

This duty they have breached. * * * 4 Restatement, Torts § 757 and comment a (1939)." And, 209 F.2d at pages 499-500, the court declares:

"At the outset of their restatement of this subject, the distinguished authors made an acute observation on the trend of the law which has since been often quoted. They said: 'But the tendency of the law, both legislative and common, has been in the direction of enforcing increasingly higher standards of fairness or commercial morality in trade. The tendency still persists.' 3 Restatement, Torts, ch. 35, p. 540 (1938), quoted with approval in *Qtips, Inc., v. Johnson & Johnson*, 3 Cir., 206 F.2d 144, 145, per Goodrich, J., and *Ross-Whitney Corp. v. Smith Kline & French Laboratories*, 9 Cir., 207 F.2d 190, 196 note 17, per Stephens, J. The present case surely is not one where we are disposed to attempt to reverse the trend."

The trial judge rightly found that these processes were not disclosed in Vitro's prospective processes foreshadowed in its unsuccessful laboratory experiments prior to any disclosure by Hall and that these processes were not disclosed in the prior art relied on by Vitro. The abstract from Young's book "Cobalt," cited by Vitro as showing that Hall's method for the separation of cobalt was old in the art, was stated by a chemical expert not to apply to Hall's process, for Young's process retains zinc and nickel in solution. Since the Hall processes were used by Vitro to Hall's detriment and were included by the parties in the agreement not to give information as "to scrap metal recovery



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processes, presently in commercial use by The Hall Chemical Company," the contention that the judgment is not supported by the findings of fact cannot be sustained.

Vitro also urges that Hall is estopped from asserting rights against Vitro under the contract of October 21, 1953, or otherwise, with respect to the disclosure of separation procedures. As to this point it suffices to state that estoppel was not pleaded, although the Federal Rules of Civil Procedure, Rule 8(c), 28 U.S.C., specifically require this. It is neither pleaded nor proved that Hall intended Vitro to rely on his general disclosures, that Hall made false representations, concealed material facts, or intended that Vitro should rely upon such facts. It is not alleged or proved that Vitro relied upon Hall's statements or changed its position in any way. Vitro's own attorneys joined in the framing of the nondisclosure contract. In *Lukens Steel Co. v. American Locomotive Co.*, 2 Cir., 197 F.2d 939, cited on by Vitro, Alco spent over half a million dollars in preparing to use the design involved. No such detriment to Vitro is either claimed or shown.

The judgment of the District Court is affirmed.

1. A number of these reports were introduced in evidence, and are quoted from herein.
2. Vitro's change of front on its contentions before the District Court requires a somewhat detailed discussion of the facts. In its complaint it alleged that it was using a process independently developed by Vitro whereas now it declares in effect that Hall gave Vitro his separation process on September 17. Its attorney stated to the District Court in argument after the evidence was closed that Vitro did not use any element in its process that it obtained from Hall prior to October 21, 1953. Vitro now claims that the separation process which it uses was fully described by Hall on September 17.

