

to recover as if owners according to the terms of the original act and the license to the du Pont Company. Manifestly, such an interpretation would give rise to a grave constitutional objection—deprivation of the Chemical Foundation of property without due process. Moreover, the licensee accepted the grant under the provision that any suit for compensation should be brought by the owner within one year after termination of the war, “for all use and enjoyment of the said patented invention,” and if not, “then the licensee shall not be liable to make any further deposits, and all funds deposited by him shall be repaid to him on order of the alien property custodian.” In the circumstances the act cannot be interpreted and applied as suggested.

The decree below must be

Affirmed.

MR. JUSTICE SUTHERLAND and MR. JUSTICE STONE took no part in the consideration or decision of these cases.

STANDARD OIL COMPANY (INDIANA) ET AL. v.
UNITED STATES.

APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES
FOR THE NORTHERN DISTRICT OF ILLINOIS.

No. 378. Argued January 13, 14, 15, 1931.—Decided April 13, 1931.

1. Agreements for interchange of licenses under patents covering processes for the manufacture of an article sold in interstate commerce, may be illegal under the Sherman Act if part of a larger plan to control interstate markets or if their necessary effect is to suppress or unduly to restrict competition. They should therefore be closely scrutinized. P. 168.
2. An interchange of patent rights and a division of royalties according to the value attributed by the parties to their respective patent claims is frequently necessary if technical advancement is not to be blocked by threatened litigation; and if the available advantages are open on reasonable terms to all manufacturers desiring to par-

ticipate, such interchange may promote rather than restrain competition. P. 170.

3. Unless the industry is dominated, or interstate commerce directly restrained, the Sherman Act does not require cross-licensing patentees to license at reasonable rates others engaged in interstate commerce. P. 172.
4. Three corporations, in the business of producing gasoline and owning patents for "cracking" processes by which the yield of gasoline from crude petroleum is greatly increased, joined with another corporation owning a similar patent, in agreements for exchanges of patent rights and division of royalties, which were challenged by the Government as obnoxious to the Sherman Act, chiefly upon the ground that they enabled the corporations to maintain existing royalties and thereby to restrain interstate commerce. *Held:*
 - (1) That the evidence must be examined to ascertain the operation and effect of the agreements. P. 173.
 - (2) Since no monopoly, or restriction of competition, either (a) in the business of licensing patented cracking processes, or (b) in the production of either ordinary or cracked gasoline, or (c) in the sale of gasoline, has been effected, either by means of the agreements or otherwise, it is not shown that, by agreeing upon royalty rates, the patentees could control either the price or the supply. Therefore, agreement upon such rates is not a ground for injunction. P. 175.
 - (3) To warrant an injunction which would invalidate the contracts here in question, and require either new arrangements by the patent owners or settlement of their conflicting claims by litigation, there must be a definite factual showing of illegality. P. 179.
5. Failure of the Government to take a cross-appeal from the decree of the District Court granting part of the relief sought in this case, makes unnecessary a review of findings adverse to the Government's contention that the patents were invalid and the cross-licensing agreements made in bad faith. P. 180.
6. In a suit for an injunction under the Sherman Act, questions raised by the Government as to validity of agreements between defendants become moot when the agreements are canceled by the defendants at the request of the District Court before entry of the decree. P. 181.

33 F. (2d) 617, reversed.

APPEAL from a decree granting part of the relief sought by the Government in a bill charging an illegal combina-

tion to monopolize and restrain interstate commerce by controlling that part of the supply of gasoline which is produced by the process of "cracking."

Messrs. Charles Neave and C. B. Ames, with whom Messrs. L. L. Stephens, Russell Wiles, John W. Davis, Chester O. Swain, William R. Carlisle, Drury W. Cooper, Harry T. Klein, John B. Marsh, and Ramsay Hoguet were on the brief, for the Standard Oil Co. (Indiana) et al., appellants.

Mr. G. H. Dorr, with whom Messrs. James J. Cosgrove, Frank L. Crawford, Oscar J. Dorwin, Richard E. Dwight, Earle W. Evans, Francis I. Fallon, W. H. Francis, George V. Holton, Albert L. Hopkins, James P. Kem, Walter G. Kirkbride, Charles A. Kreps, R. E. Lambertson, William A. McAfee, Charles G. Middleton, S. A. Mitchell, Burton W. Musser, G. J. Neuner, Peter M. Speer, Oscar Sutro, C. A. Thompson, J. Merrill Wright, Merritt Starr, H. O. Bentley, Donald J. De Wolfe, and Edgar E. Townes were on the brief, for the Beacon Oil Co. et al., appellants.

Solicitor General Thacher, with whom Assistant to the Attorney General O'Brian and Mr. Charles H. Weston, Special Assistant to the Attorney General, were on the brief, for the United States.

MR. JUSTICE BRANDEIS delivered the opinion of the Court.

This suit was brought by the United States in June, 1924, in the federal court for northern Illinois, to enjoin further violation of § 1 and § 2 of the Sherman Anti-Trust Act, July 2, 1890, c. 647, 26 Stat. 209. The violation charged is an illegal combination to create a monopoly and to restrain interstate commerce by controlling that part of the supply of gasoline which is produced by the process of cracking. Control is alleged to be exerted by

means of seventy-nine contracts concerning patents relating to the cracking art. The parties to the several contracts are named as defendants. Four of them own patents covering their respective cracking processes, and are called the primary defendants. Three of these, the Standard Oil Company of Indiana, the Texas Company, and the Standard Oil Company of New Jersey, are themselves large producers of cracked gasoline. The fourth, Gasoline Products Company, is merely a licensing concern. The remaining forty-six defendants manufacture cracked gasoline under licenses from one or more of the primary defendants. They are called secondary defendants.

Upon the filing of the answers, which denied the violation charged, the case was referred to a special master to take and report the evidence to the court, together with his findings of fact and conclusions of law. Although the Attorney General had filed an expediting certificate¹ on February 24, 1925, it was not until January 20, 1930, that the District Court entered its final decree. The hearings before the master extended over nearly three years. The evidence, including 327 exhibits, fills more than 4300 pages of the printed record. The master's report, which occupies 240 pages, is devoted largely to a discussion of the seventy-three patents and seventy-nine license contracts. The master found that the primary defendants had not pooled their patents relating to cracking processes; that they had not monopolized or attempted to monopolize any part of the trade or commerce in gasoline; and that none of the defendants had entered into any combination in restraint of trade. He recommended that the bill be dismissed for want of equity. After a hearing, on 273 exceptions filed by the Government, the District Court granted some of the relief asked. 33 F. (2d) 617.

¹ Pursuant to the Act of February 11, 1903, c. 544, 32 Stat. 823, as amended by Act of June 25, 1910, c. 428, 36 Stat. 854.

The primary defendants and twenty-five of the secondary defendants appealed to this Court. An order of severance was entered, and the injunction was stayed.

The issues to which most of the evidence was addressed have been eliminated. The violation of the Sherman Act now complained of rests substantially on the making and effect of three contracts entered into by the primary defendants. The history of these agreements may be briefly stated. For about half a century before 1910, gasoline had been manufactured from crude oil exclusively by distillation and condensation at atmospheric pressure. When the demand for gasoline grew rapidly with the widespread use of the automobile, methods for increasing the yield of gasoline from the available crude oil were sought. It had long been known that, from a given quantity of crude, additional oils of high volatility could be produced by "cracking"; that is, by applying heat and pressure to the residuum after ordinary distillation. But a commercially profitable cracking method and apparatus for manufacturing additional gasoline had not yet been developed. The first such process was perfected by the Indiana Company in 1913; and for more than seven years this was the only one practiced in America. During that period the Indiana Company not only manufactured cracked gasoline on a large scale, but also had licensed fifteen independent concerns to use its process and had collected, prior to January 1, 1921, royalties aggregating \$15,057,432.46.

Meanwhile, since the phenomenon of cracking was not controlled by any fundamental patent, other concerns had been working independently to develop commercial processes of their own. Most prominent among these were the three other primary defendants, the Texas Company, the New Jersey Company, and the Gasoline Products Company. Each of these secured numerous patents covering its particular cracking process. Beginning in

1920, conflict developed among the four companies concerning the validity, scope, and ownership of issued patents. One infringement suit was begun; cross-notice of infringement, antecedent to other suits, were given; and interferences were declared on pending applications in the Patent Office. The primary defendants assert that it was these difficulties which led to their executing the three principal agreements which the United States attacks; and that their sole object was to avoid litigation and losses incident to conflicting patents.

The first contract was executed by the Indiana Company and the Texas Company on August 26, 1921; the second by the Texas Company and Gasoline Products Company on January 26, 1923; the third by the Indiana Company, the Texas Company, and the New Jersey Company, on September 28, 1923. The three agreements differ from one another only slightly in scope and terms. Each primary defendant was released thereby from liability for any past infringement of patents of the others. Each acquired the right to use these patents thereafter in its own process. Each was empowered to extend to independent concerns, licensed under its process, releases from past, and immunity from future claims of infringement of patents controlled by the other primary defendants. And each was to share in some fixed proportion the fees received under these multiple licenses. The royalties to be charged were definitely fixed in the first contract; and minimum sums per barrel, to be divided between the Texas and Indiana companies, were specified in the second and third. These royalty provisions, and others, will be detailed later.

First. The defendants contend that the agreements assailed relate solely to the issuance of licenses under their respective patents; that the granting of such licenses, like the writing of insurance, *New York Life Ins. Co. v. Deer Lodge County*, 231 U. S. 495, is not interstate commerce; and that the Sherman Act is therefore inapplicable. This

contention is unsound. Any agreement between competitors may be illegal if part of a larger plan to control interstate markets. *Montague & Co. v. Lowry*, 193 U. S. 38; *Shawnee Compress Co. v. Anderson*, 209 U. S. 423. Such contracts must be scrutinized to ascertain whether the restraints imposed are regulations reasonable under the circumstances, or whether their effect is to suppress or unduly restrict competition. *Chicago Board of Trade v. United States*, 246 U. S. 231, 238; *Paramount Famous Lasky Corp. v. United States*, 282 U. S. 30, 43. Moreover, while manufacture is not interstate commerce, agreements concerning it which tend to limit the supply or to fix the price of goods entering into interstate commerce, or which have been executed for that purpose, are within the prohibitions of the Act. *Swift & Co. v. United States*, 196 U. S. 375, 397; *Coronado Coal Co. v. United Mine Workers*, 268 U. S. 295, 310; *United States v. Trenton Potteries Co.*, 273 U. S. 392. And pooling arrangements may obviously result in restricting competition. Compare *Northern Securities Co. v. United States*, 193 U. S. 197, 326. The limited monopolies granted to patent owners do not exempt them from the prohibitions of the Sherman Act and supplementary legislation. *Standard Sanitary Mfg. Co. v. United States*, 226 U. S. 20; *Virtue v. Creamery Package Mfg. Co.*, 227 U. S. 8. Compare *United Shoe Machinery Co. v. United States*, 258 U. S. 451; *United States v. General Electric Co.*, 272 U. S. 476.² Hence the necessary

² Historically, patent grants were only narrow exceptions to the general public policy against monopolies which developed from the Case of Monopolies, Moore 671, 11 Co. 84, and culminated in the Statute of Monopolies, 21 Jac. I, c. 3, §§ V-VI. See Price, *The English Patents of Monopoly*, cc. 1-3. Compare the debates on the Sherman Act, 21 Cong. Rec., Pt. III, 51st Cong., 1st Sess., pp. 2455-62. Even apart from the limitations of the Anti-Trust laws, the monopoly granted by the patent statute is not unrestricted in scope. Compare *Carbice Corp. v. American Patents Development Corp.*, ante, p. 27.

effect of patent interchange agreements, and the operations under them, must be carefully examined in order to determine whether violations of the Act result. *Standard Sanitary Mfg. Co. v. United States*, 226 U. S. 20.³

Second. The Government contends that the three agreements constitute a pooling by the primary defendants of the royalties from their several patents; that thereby competition between them in the commercial exercise of their respective rights to issue licenses is eliminated; that this tends to maintain or increase the royalty charged secondary defendants and hence to increase the manufacturing cost of cracked gasoline; that thus the primary defendants exclude from interstate commerce gasoline which would, under lower competitive royalty rates, be produced; and that interstate commerce is thereby unlawfully restrained. There is no provision in any of the agreements which restricts the freedom of the primary defendants individually to issue licenses under their own patents alone or under the patents of all the others; and no contract between any of them, and no license agreement with a secondary defendant executed pursuant thereto, now imposes any restriction upon the quantity of gasoline to be produced, or upon the price, terms, or conditions of sale, or upon the territory in which sales may be made.⁴ The only restraint thus charged is that necessarily arising out of the making and effect of the provisions for cross-licensing and for division of royalties.

The Government concedes that it is not illegal for the primary defendants to cross-license each other and the respective licensees; and that adequate consideration can legally be demanded for such grants. But it contends

³ Similarly, agreements relating to other limited statutory monopolies, such as copyrights, are within the Act. *Straus v. American Publishers' Assn.*, 231 U. S. 222. Compare *Ingersoll & Bro. v. McColl*, 204 Fed. 147.

⁴ Restrictive provisions in the first contract and in certain licenses issued pursuant thereto were eliminated before the entry of the decree below. See *infra*, p. 181.

that the insertion of certain additional provisions in these agreements renders them illegal. It urges, first, that the mere inclusion of the provisions for the division of royalties, constitutes an unlawful combination under the Sherman Act because it evidences an intent to obtain a monopoly. This contention is unsound. Such provisions for the division of royalties are not in themselves conclusive evidence of illegality. Where there are legitimately conflicting claims or threatened interferences, a settlement by agreement, rather than litigation, is not precluded by the Act. Compare *Virtue v. Creamery Package Co.*, 227 U. S. 8, 33. An interchange of patent rights and a division of royalties according to the value attributed by the parties to their respective patent claims is frequently necessary if technical advancement is not to be blocked by threatened litigation.⁵ If the available advantages are open on reasonable terms to all manufacturers desiring to participate, such interchange may promote rather than restrain competition.⁶ Compare *American Column & Lumber Co. v. United States*, 257 U. S. 377, 414-15; *Maple Flooring Manufacturers Assn. v. United States*, 268 U. S. 563, 578.

⁵ This is often the case where patents covering improvements of a basic process, owned by one manufacturer, are granted to another. A patent may be rendered quite useless, or "blocked," by another unexpired patent which covers a vitally related feature of the manufacturing process. Unless some agreement can be reached, the parties are hampered and exposed to litigation. And, frequently, the cost of litigation to a patentee is greater than the value of a patent for a minor improvement. See *Interchange of Patent Rights*, National Economic Conference Board, *Trade Associations—Their Economic Significance and Legal Status* (1925) c. IX; Fenning, *Interest of Trade Associations in Patents and Trade-Marks*, 3 *Harvard Business Rev.* 81, 82.

⁶ Such agreements, varying in purpose, scope, and validity, are not uncommon. See *Rep. Atty. Gen.* (1924) p. 16; *id.* (1925) p. 20. Conflict of patents in the automobile industry, and the early difficulties encountered with an alleged basic patent (see *Electric Vehicle Co. v. Winton Motor-Carriage Co.*, 104 Fed. 814, 172 Fed. 923,

Third. The Government next contends that the agreements to maintain royalties violate the Sherman Law because the fees charged are onerous. The argument is that the competitive advantage which the three primary defendants enjoy of manufacturing cracked gasoline free of royalty, while licensees must pay to them a heavy tribute in fees, enables these primary defendants to exclude from interstate commerce cracked gasoline which would, under lower competitive royalty rates, be produced by possible rivals. This argument ignores the privileges incident to ownership of patents. Unless the industry is dominated, or interstate commerce directly restrained, the Sherman Act does not require cross-licensing patentees to license at reasonable rates others engaged in interstate commerce. Compare *Bement v. National Harrow Co.*, 186 U. S. 70; *United States v. General Electric Co.*, 272 U. S. 476, 490. The allegation that the royalties charged are onerous is, standing alone, without legal significance;⁷ and, as will

reversed, 184 Fed. 893), led to an agreement in 1915 by which the members of the National Automobile Chamber of Commerce cross-licensed each other without royalty for the use of all patent improvements. This agreement was renewed as to existing patents in 1925. See Epstein, *The Automobile Industry*, pp. 227-239, 361. Interchange of basic aviation patents was made during the world war, at the suggestion of the National Advisory Committee for Aeronautics; and this agreement, providing for fixed royalties, was approved by the Attorney-General. See 31 Op. Atty. Gen. 166. In 1928 the arrangement was modified and renewed. See 26 *Aviation* (1929), pp. 728-29; Report of Select Committee of Inquiry into Operations of the United States Air Services, H. Rep. No. 1653, 68th Cong., 2d Sess., pp. 10-14. Various patent exchanges existing in the radio industry are detailed in the Report of the Federal Trade Commission on the Radio Industry (1923), c. II, Appendices. See also Ann. Rep. Federal Trade Comm. 1924, pp. 19-20; *Federal Trade Comm. v. General Electric Co.*, F. T. C. Docket No. 1115, dismissed December 19, 1928. For early patent interchanges and combinations in other industries, see Vaughan, *Economics of Our Patent System*, pp. 34-104.

⁷ The Government introduced no evidence in support of the allegation that the royalty rates charged are onerous; and, as will be

be shown, neither the alleged domination, nor restraint of commerce has been proved.

Fourth. The main contention of the Government is that even if the exchange of patent rights and division of royalties are not necessarily improper and the royalties are not oppressive, the three contracts are still obnoxious to the Sherman Act because specific clauses enable the primary defendants to maintain existing royalties and thereby to restrain interstate commerce. The provisions which constitute the basis for this charge are these. The first contract specifies that the Texas Company shall get from the Indiana Company one-fourth of all royalties thereafter collected under the latter's existing license agreements; and that all royalties received under licenses thereafter issued by either company shall be equally divided. Licenses granting rights under the patents of both are to be issued at a fixed royalty—approximately that charged by the Indiana Company when its process was alone in the field. By the second contract, the Texas Company is entitled to receive one-half of the royalties thereafter collected by the Gasoline Products Company from its existing licensees, and a minimum sum per barrel for all oil cracked by its future licensees. The third contract gives to the Indiana Company one-half of all royalties thereafter paid by existing licensees of the New Jersey Company, and a similar minimum sum for each barrel treated by its future licensees,—subject in the latter case to reduction if the royalties charged by the Indiana and Texas companies for their processes should be reduced.⁸

detailed later, the continued operations of the licensees, their increasing production, and the absence of complaint on their part tend to disprove the charge. Compare Notes 11, 17, *infra*.

⁸ Payments received by the Texas and Indiana companies under the second and third contracts are divided equally by these companies pursuant to the terms of the first. That contract further provides that all royalties received after January 1, 1937, even from existing licensees, are to be divided equally between the two companies.

The alleged effect of these provisions is to enable the primary defendants, because of their monopoly of patented cracking processes, to maintain royalty rates at the level established originally for the Indiana process.

The rate of royalties may, of course, be a decisive factor in the cost of production. If combining patent owners effectively dominate an industry, the power to fix and maintain royalties is tantamount to the power to fix prices.⁹ *National Harrow Co. v. Hench*, 76 Fed. 667; affirmed, 83 Fed. 36, see also 84 Fed. 226; *Blount Mfg. Co. v. Yale & Towne Mfg. Co.*, 166 Fed. 555. Where domination exists, a pooling of competing process patents, or an exchange of licenses for the purpose of curtailing the manufacture and supply of an unpatented product, is beyond the privileges conferred by the patents and constitutes a violation of the Sherman Act. The lawful individual monopolies granted by the patent statutes cannot be unitedly exercised to restrain competition. *Standard Sanitary Mfg. Co. v. United States*, 226 U. S. 20; *United States v. New Departure Mfg. Co.*, 204 Fed. 107; *United States v. Motion Picture Patents Co.*, 225 Fed. 800, appeal dismissed, 247 U. S. 524. Compare *United States v. Kellogg Toasted Corn Flakes Co.*, 222 Fed. 725; *United*

⁹ Where the royalty demanded is a fixed percentage of the gross sales price, this relationship is clear. A combination of patent-owning manufacturers, which required royalty payments on this basis and which appeared to dominate the automobile bumper industry, was dissolved by a consent decree entered in the District Court for Southern New York in December, 1917. See *United States v. Discher*, unreported, noted in *Federal Antitrust Laws and Decisions* (Department of Justice) 1928, pp. 147-48. See also National Economic Conference Board, *op. cit. supra* note 5, pp. 139-40; *United States v. Discher*, 255 Fed. 719. Moreover, the monopoly granted by the patent does not include the right to fix the resale price of the patent product. *Bauer & Cie v. O'Donnell*, 229 U. S. 1; *Straus v. Victor Talking Machine Co.*, 243 U. S. 490; *Boston Store v. American Graphophone Co.*, 246 U. S. 8.

States v. Eastman Kodak Co., 226 Fed. 62, appeal dismissed, 255 U. S. 578.¹⁰ But an agreement for cross-licensing and division of royalties violates the Act only when used to effect a monopoly, or to fix prices, or to impose otherwise an unreasonable restraint upon interstate commerce. Compare *Bement v. National Harrow Co.*, 186 U. S. 70; *Cement Manufacturers Protective Assn. v. United States*, 268 U. S. 588, 604; *United States v. General Electric Co.*, 272 U. S. 476, 490; *United States v. Trenton Potteries Co.*, 273 U. S. 392, 397. In the case at bar, the primary defendants own competing patented processes for manufacturing an unpatented product which is sold in interstate commerce; and agreements concerning such processes are likely to engender the evils to which the Sherman Act was directed. Compare *United States v. International Harvester Co.*, 214 Fed. 987, appeal dismissed, 248 U. S. 587. We must, therefore, examine the evidence to ascertain the operation and effect of the challenged contracts.

Fifth. No monopoly, or restriction of competition, in the business of licensing patented cracking processes resulted from the execution of these agreements. Up to 1920 all cracking plants in the United States were either owned by the Indiana Company alone, or were operated under licenses from it. In 1924 and 1925, after the cross-licensing arrangements were in effect, the four primary defendants owned or licensed, in the aggregate, only 55% of the total cracking capacity, and the remainder was distributed among twenty-one independently owned cracking processes. This development and commercial expansion

¹⁰ Such agreements, though involving patent rights, have also been held to be in violation of state anti-trust laws. *Vulcan Powder Co. v. Hercules Powder Co.*, 96 Cal. 510; 31 Pac. 581; *State v. Creamery Package Mfg. Co.*, 110 Minn. 415, 435; 126 N. W. 126. Cf. *United Shoe Machinery Co. v. La Chapelle*, 212 Mass. 467, 479; 99 N. E. 289.

of competing processes is clear evidence that the contracts did not concentrate in the hands of the four primary defendants the licensing of patented processes for the production of cracked gasoline.¹¹ Moreover, the record does not show that after the execution of the agreements there was a decrease of competition among them in licensing other refiners to use their respective processes.¹²

No monopoly, or restriction of competition, in the production of either ordinary or cracked gasoline has been proved. The output of cracked gasoline in the years in question¹³ was about 26% of the total gasoline production. Ordinary or straight run gasoline is indistinguishable from cracked gasoline and the two are either mixed or sold interchangeably. Under these circumstances the primary defendants could not effectively control the sup-

¹¹ There is no evidence in the record showing the ratio of defendants' processes to those of other companies after 1925. Ratios since then are indicated in the official Bureau of Mines surveys of cracking plants, which, beginning in 1929, report the distribution of the various cracking processes. See Petroleum Refining Statistics, 1928, Department of Commerce, Bureau of Mines, Bull. 318, pp. 122-23; *id.*, Survey of Cracking Plants, January 1, 1930, Information Circular No. 6305, p. 6.

¹² Between the execution of the respective contracts and the bringing of this suit, the Indiana Company issued two new licenses, the Texas Company two, and Gasoline Products ten. Between the filing of the bill and May, 1925, the Gasoline Products Company appears to have issued ten additional new licenses. There is no evidence concerning the licensing operations of the other three primary defendants in this period.

¹³ The estimates of the production of cracked gasoline, and other evidence upon which the injunction was issued in January, 1930, cover only the period to 1925. Much of this evidence, including statements of the production of two of the three producing primary defendants, relates to operations no later than 1924. Although frequently given in terms of barrels, production figures, where used in this opinion, have been uniformly converted into gallons.

ply or fix the price of cracked gasoline by virtue of their alleged monopoly of the cracking processes, unless they could control, through some means, the remainder of the total gasoline production from all sources.¹⁴ Proof of such control is lacking. Evidence of the total gasoline production, by all methods, of each of the primary defendants and their licensees is either missing or unsatisfactory in character.¹⁵ The record does not accurately

¹⁴ In addition to straight run and cracked gasoline, which are refined from crude oil, a third kind, known as natural-gas or casing-head gasoline, is produced from natural gas. In 1925 this method accounted for 7.6% of the total gasoline production. Petroleum Refining Statistics, 1926, Department of Commerce, Bureau of Mines, Bull. No. 289, pp. 57-58. Because of its great volatility, natural-gas gasoline is now mainly used for blending with other types. See American Petroleum Institute, Petroleum Facts and Figures (2d ed., 1929) pp. 152-54. Thus it increases the total amount of gasoline refined, and, to this extent, control of production of natural-gas gasoline might be necessary to secure complete domination of the gasoline refining industry. There is, however, no evidence as to the production or purchase of this type of gasoline by any of the primary defendants except the New Jersey Company and its subsidiaries, which in 1925 manufactured about one-fifth of all the natural-gas gasoline recovered.

¹⁵ In 1924 the total gasoline production in gallons was 8,959,680,198; in 1925 it was 10,886,127,000. The New Jersey Company and its subsidiaries, as to which complete estimates alone are given in the record, produced by all methods 1,445,273,195 gallons, or about 16% of the total in 1924; and 1,581,314,145 gallons, or about 14.5% in 1925. The Texas Company estimated its total production, exclusive of its licensees, for the year 1924 at 602,918,348 gallons, or about 6.6% of the total. These are the only estimates as to the total production of all kinds of gasoline. In the absence of definite figures as to such total gasoline production by all methods, domination of the refining industry by the three primary defendants cannot be shown. Compare Federal Trade Commission, Prices, Profits, and Competition in the Petroleum Industry, Sen. Doc. No. 61, 70th Cong., 1st Sess., pp. 157 *et seq.*

show even the total amount of cracked gasoline produced,¹⁶ or the production of each of the licensees, or competing refiners. Widely variant estimates of such production figures have been submitted. These were not accepted by the master and there is no evidence which would justify our doing so.¹⁷

No monopoly, or restriction of competition, in the sale of gasoline has been proved. On the basis of testimony relating to the marketing of both cracked and ordinary gasoline, the master found that the defendants were in active competition among themselves and with other refiners; that both kinds of gasoline were refined and sold in large quantities by other companies; and that the primary defendants and their licensees neither individually nor collectively controlled the market price or supply of any gasoline moving in interstate commerce. There is ample evidence to support these findings.

¹⁶ No Bureau of Mines statistics on the production of gasoline, distributed according to method of refining, exist for the period prior to January, 1925. See Petroleum Refining Statistics, 1916-25, Department of Commerce, Bureau of Mines, Bull. No. 280, p. 125. Hence all the statistics presented as to the total amount of cracked gasoline produced theretofore are only estimates.

¹⁷ The Government estimated that in 1924 the total production of cracked gasoline amounted to 1,443,036,000 gallons. The New Jersey Company estimated that the total production in that year was 1,680,000,000 gallons; and an estimate based on a Bureau of Mines statement that cracked gasoline was 20% of the total, comes to 1,791,938,400 gallons. If the New Jersey figure is accepted as a base, it appears that in 1924, the Indiana Company produced 444,307,600 gallons of cracked gasoline, or 26.5% of the total; the Texas Company, 316,552,110 gallons, or 18.8%; and the New Jersey Company and its subsidiaries, 350,491,190 gallons, or 20.8%. Thus, on this basis, these three primary defendants manufactured 66.1% of the total cracked gasoline in 1924. In reliance on its own estimated total production, which was the lowest submitted, the Government alleged that they manufactured 81.04% in the same year. The inaccuracy of all of these estimates of total production of cracked

Thus it appears that no monopoly of any kind, or restraint of interstate commerce, has been effected either by means of the contracts or in some other way. In the absence of proof that the primary defendants had such control of the entire industry as would make effective the alleged domination of a part, it is difficult to see how they could by agreeing upon royalty rates control either the price or the supply of gasoline, or otherwise restrain competition. By virtue of their patents they had individually the right to determine who should use their respective processes or inventions and what the royalties for such use should be. To warrant an injunction which would invalidate the contracts here in question, and require either new arrangements or settlement of the conflicting claims by litigation, there must be a definite factual showing of illegality. *Chicago Board of Trade v. United States*, 246 U. S. 231, 238.

gasoline is aptly illustrated by the first official Bureau of Mines figures for the next year, 1925. See Note 16, *supra*. For that year the total cracked gasoline production is reported at 2,880,486,000 gallons—or over a billion gallons more than the highest estimate for 1924. Compare Bull. 280, *loc. cit. supra*, Note 16.

Moreover, to determine the total production of both primary and secondary defendants, the Government calculated the production of each licensee by dividing its royalty payments by varying estimates of the amount of royalty per gallon. Adding these amounts to its estimated production of the three producing primary defendants, it submitted that in 1921 the primary defendants and their licensees refined about 86% of the total cracked gasoline produced, and in 1924 about 94%. But in most cases royalties were paid by the secondary licensees on the basis of the amount of "charging stock" or residual oil treated. To determine a licensee's production from its royalty payments, it was thus first necessary to estimate the rate of conversion into finished cracked gasoline. Sufficient data for doing so accurately for each licensee was lacking. The rate of conversion differs with the type of installation, composition of stock treated, and plant efficiency, and the estimated conversion rates relied upon by the Government varied from 25% to 31%.

Sixth. In the District Court, the Government undertook to prove the violation charged by showing that the three agreements challenged were made by the primary defendants in bad faith. The bulk of the testimony introduced by it, is directed to this issue and relates to the validity and scope of twenty-three jointly-used patents which were selected by it for attack.¹⁸ This evidence was admitted, over objection, for the purpose of showing that these patents were either invalid or narrow in scope; that there was no substantial foundation for the alleged conflicts and threatened infringement suits; that these were a pretext; and that the patents had been secured, and their infringement was being asserted, merely as a means of lending color of legality to the making of the contracts by which competition would inevitably be suppressed.¹⁹ The master found, after an elaborate review of the entire art, that the presumption of validity attaching to the patents had not been negatived in any way; that they merited a broad interpretation; that they had been acquired in

¹⁸ Prior to trial the United States propounded eighty-one interrogatories to each of the primary defendants, concerning the use of some seventy-three patents. These interrogatories were answered in detail with the reservation that the admissions of use were merely opinions of counsel, but that nevertheless each defendant believed adversely held patents to constitute a basis for suit. The Government selected twenty-three patents for attack. One hundred and thirty-one of the 273 exceptions filed by it to the master's report concern these patents. The evidence relating to them comprises five volumes of the present record.

¹⁹ After the first hearing the master certified the question whether this evidence was admissible. The District Court held that it was. Nevertheless, in his final report the master stated that he was of the opinion that examination of the prior art could be made only for the purpose of determining whether the patents were useful, of adequate scope, and reasonably related to the contracts. He also ruled that it was not necessary to determine whether any of the competing process patents actually infringed another. These rulings were not disturbed by the court.

good faith; and that the scope of the several groups of patents overlapped sufficiently to justify the threats and fear of litigation. The District Court stated that the particular claims should be interpreted narrowly, and that the respective inventions might be practised without infringement of adversely owned patents. But it confirmed the finding of presumptive validity and did not question the finding of good faith. It held that the patents were adequate consideration for the cross-licensing agreements and that the violation charged could not be predicated on patent invalidity. Inasmuch as the Government did not appeal from these findings, we need not consider any of the issues concerning the validity or scope of the cracking patents; and we accept the finding that they were acquired in good faith. Neither the findings nor the evidence on this issue supply any ground for invalidating the contracts.²⁰

Seventh. The remaining issues in the case have become moot. The Government objected to a number of early Indiana Company licenses which contained certain territorial restrictions on the production of cracked gasoline; and also to a provision in the first contract between primary defendants, and in licenses thereunder, by which the Indiana Company secured an option to purchase a portion of the cracked gasoline manufactured in, or shipped into, its sales territory. At the hearing before the District Court it appeared that these provisions had never been enforced. Upon the court's request the objectionable clauses were voluntarily canceled some months before the entry of the decree. Similarly, the propriety

²⁰ The District Court also dismissed, upon the master's findings and recommendation, a supplementary petition against two additional defendants, which charged that certain patents had been secured by fraud and that a conspiracy had been entered into to injure the owner of a competing cracking process. The United States did not appeal from this order.

of certain blanket acknowledgments of patent validity in the first contract, and in a number of licenses under later contracts, was questioned by the lower court. At its suggestion, these provisions also were formally canceled by the parties. As the relief here sought is an injunction, and hence relates only to the future, *United States v. Hamburg-Amerikanische Packetfahrt-Actien Gesellschaft*, 239 U. S. 466, 475, the alleged validity of such provisions has become moot. *Berry v. Davis*, 242 U. S. 468; *Commercial Cable Co. v. Burleson*, 250 U. S. 360; *Alejandro v. Quezon*, 271 U. S. 528; *United States v. Anchor Coal Co.*, 279 U. S. 812.

Eighth. The District Court accepted the Government's estimates of cracked gasoline production; found that the primary defendants were able to control both supply and price by virtue of their control of the cracking patents; held that although these patents were valid consideration for the cross-licenses, the agreement to maintain royalties was in effect a method for fixing the price of cracked gasoline; and concluded that a monopoly existed as a result of such agreements. This appears to be the only basis for the relief granted. But the widely varying estimates, relied upon to establish dominant control of the production of cracked gasoline were insufficient for that purpose.²¹ And the court entirely disregarded not only the fact that the manufacture of the cracked is only a part of the total gasoline production, but also the evidence showing active competition among the defendants themselves and with

²¹ The court apparently accepted, as accurate, the Government's estimates of cracked gasoline production, and stated: "It is the actual production rather than 'cracking capacity' that is significant. To ascertain whether a monopoly exists we must look to the production rather than the capacity percentages." 33 F. (2d) 617, 625. But the estimates of total cracked gasoline production cannot be accepted, and there was no adequate showing of the proportion actually manufactured by these defendants. See Note 17, *supra*.

others. Its findings are without adequate support in the evidence. The bill should have been dismissed.

The Government now seeks no relief against the secondary defendants. It concedes that fifty-three of the seventy-nine contracts, originally set out in the petition, are wholly beyond attack, because they are licenses issued to secondary defendants prior to the execution by their licensors of the three main agreements challenged. As to the remaining contracts between primary and secondary defendants, the Government on this appeal agreed that the decree should be modified to declare such contracts voidable at the option of the licensees. This modification was assented to at the bar by counsel for the primary defendants. But as we are of the opinion that the decree should be reversed and the bill dismissed, we see no occasion for interfering with the present license arrangements.

Reversed.

MR. JUSTICE STONE took no part in the consideration or decision of this case.

INTERSTATE TRANSIT, INCORPORATED, v.
LINDSEY, COUNTY COURT CLERK.

APPEAL FROM THE SUPREME COURT OF TENNESSEE.

No. 358. Argued March 19, 1931.—Decided April 13, 1931.

1. A state tax upon the operation of motor vehicles engaged exclusively in interstate commerce, being a direct burden on that commerce, can not be sustained unless it appears affirmatively, in some way, that it is levied only as compensation for use of the highways in the State or to defray the expense of regulating motor traffic. P. 185.
2. Tennessee Act of 1927, c. 89, § 4, imposed upon concerns operating interstate motor buses on the highways of the State a privilege tax graduated according to carrying capacity. It is part of a general revenue act which deals with practically all of the taxes laid by the State, except those which admittedly provide for defraying