United States v. E. I. du Pont de Nemours & Co.

351 U.S. 377 (1956)

Mr. Justice REED delivered the opinion of the Court.

The United States brought this civil action under § 4 of the Sherman Act against E. I. Du Pont de Nemours and Company. The complaint, filed December 13, 1947, in the United States District Court for the District of Columbia, charged Du Pont with monopolizing, attempting to monopolize and conspiracy to monopolize interstate commerce in cellophane and cellulosic caps and bands in violation of § 2 of the Sherman Act. Relief by injunction was sought against defendant and its officers, forbidding monopolizing or attempting to monopolize interstate trade in cellophane. . . . After a lengthy trial, judgment was entered for Du Pont on all issues.

The Government's direct appeal here . . . 'attacks only the ruling that Du Pont has not monopolized trade in cellophane.' At issue for determination is only this alleged violation by Du Pont of § 2 of the Sherman Act.

During the period that is relevant to this action, Du Pont produced almost 75% of the cellophane sold in the United States, and cellophane constituted less than 20% of all 'flexible packaging material' sales. . . .

The Government contends that, by so dominating cellophane production, Du Pont monopolized a 'part of the trade or commerce' in violation of § 2. . . . Du Pont contends that the prohibition of § 2 against monopolization is not violated because it does not have the power to control the price of cellophane or to exclude competitors from the market in which cellophane is sold. The court below found that the 'relevant market for determining the extent of Du Pont's market control is the market for flexible packaging materials,' and that competition from those other materials prevented Du Pont from possessing monopoly powers in its sales of cellophane.

The Government asserts that cellophane and other wrapping materials are neither substantially fungible nor like priced. For these reasons, it argues that the market for other wrappings is distinct from the market for cellophane and that the competition afforded cellophane by other wrappings is not strong enough to be considered in determining whether Du Pont has monopoly powers. . . . Every manufacturer is the sole producer of the particular commodity it makes but its control in the above sense of the relevant market depends upon the availability of alternative commodities for buyers: *i.e.*, whether there is a cross-elasticity of demand between cellophane and the other wrappings. . . . The court below found that the flexible wrappings afforded [alternatives to cellophane]. This Court must determine whether the trial court erred in its estimate of the competition afforded cellophane by other materials. . . .

Two additional questions were raised in the record and decided by the court below. That court found that, even if Du Pont did possess monopoly power over sales of cellophane, it was not subject to Sherman Act prosecution, because (1) the acquisition of that power was protected by patents, and (2) that power was acquired solely through Du Pont's business expertness.

I. Factual Background.—For consideration of the issue as to monopolization, a general summary of the development of cellophane is useful.—[In the early 20th century, Jacques Brandenberger, a Swiss chemist, developed patented synthetic materials that could be used for insulation and to wrap things, most importantly then—wrapping food. In the decades that followed, cellophane was used to the most desirable material to wrap sandwiches. Du Pont was an American leader in the field of synthetics. It acquired exclusive rights to make and sell cellophane in North and Central America].

An important factor in the growth of cellophane production and sales was the perfection of moisture-proof cellophane, a superior product [that Du Pont developed and patented in 1927]. Plain cellophane has little resistance to the passage of moisture vapor. Moisture-proof cellophane has a composition added which keeps moisture in and out of the packed commodity. This patented type of cellophane has had a demand with much more rapid growth than the plain.

[After extensive litigation another American company, Sylvania, secured licenses to make and sell cellophane in North America, thereby creating competition to Du Pont. In 1933, Du Pont] licensed Sylvania to manufacture and sell moisture-proof cellophane produced under the Du Pont patents at a royalty of 2% of sales. These licenses . . . made Sylvania a full cellophane competitor, limited on moisture-proof sales by the terms of the licenses to 20% of the combined sales of the two companies of that type by the payment of a prohibitive royalty on the excess. There was never an excess production. The limiting clause was dropped on January 1, 1945.

Between 1928 and 1950, Du Pont's sales of plain cellophane increased from $3,131,608 to $9,330,776. Moisture-proof sales increased from $603,222 to $89,850,416, although prices were continuously reduced. It could not be said that this immense increase in use was solely or even largely attributable to the superior quality of cellophane or to the technique or business acumen of Du Pont, though doubtless those factors were important. The growth was a part of the expansion of the commodity-packaging habits of business, a by-product of general efficient competitive merchandising to meet modern demands. The profits, which were large, apparently arose from this trend in marketing, the development of the industrial use of chemical research and production of synthetics, rather than from elimination of other producers from the relevant market. . . .

II. The Sherman Act and the Courts.—The Sherman Act has received long and careful application by this Court to achieve for the Nation the freedom of enterprise from monopoly or restraint envisaged by the Congress that passed the Act in 1890. Because the Act is couched in broad terms, it is adaptable to the changing types of commercial production and distribution that have evolved since its passage. . . . It was said in *Standard*

Oil Co. of New Jersey v. United States, 221 U.S. 1, 50 (1911), that fear of the power of rapid accumulations of individual and corporate wealth from the trade and industry of a developing national economy caused its passage. Units of traders and producers snowballed by combining into so-called 'trusts.' Competition was threatened. Control of prices was feared. Individual initiative was dampened. While the economic picture has changed, large aggregations or private capital, with power attributes, continue. Mergers go forward. Industries such as steel, automobiles, tires, chemicals, have only a few production organizations. A considerable size is often essential for efficient operation in research, manufacture and distribution.

Judicial construction of anti-trust legislation has generally been left unchanged by Congress. This is true of the Rule of Reason. While it is fair to say that the Rule is imprecise, its application in Sherman Act litigation, as directed against enhancement of price or throttling of competition, has given a workable content to antitrust legislation. It was judicially declared a proper interpretation of the Sherman Act in [the 1911 *Standard Oil* decision], with a strong, clear-cut dissent challenging its soundness on the ground that the specific words of the Act covered every contract that tended to restrain or monopolize. This Court has not receded from its position on the Rule. There is not, we think, any inconsistency between it and the development of the judicial theory that agreements as to maintenance of prices or division of territory are in themselves a violation of the Sherman Act. It is logical that some agreements and practices are invalid per se, while others are illegal only as applied to particular situations. . . .

III. The Sherman Act, § 2—Monopolization.—The only statutory language of § 2 pertinent on this review is: 'Every person who shall monopolize * * * shall be deemed guilty * * *.' This Court has pointed out that monopoly at common law was a grant by the sovereign to any person for the sole making or handling of anything so that others were restrained or hindered in their lawful trade. *Standard Oil Co. of New Jersey v. United States*, 221 U.S. 1, 51 (1911). However, as in England, it came to be recognized here that acts bringing the evils of authorized monopoly—unduly diminishing competition and enhancing prices—were undesirable, . . . and were declared illegal by § 2. Our cases determine that a party has monopoly power if it has, over 'any part of the trade or commerce among the several states', a power of controlling prices or unreasonably restricting competition. . . .

If cellophane is the 'market' that Du Pont is found to dominate, it may be assumed it does have monopoly power over that 'market.' Monopoly power is the power to control prices or exclude competition. It seems apparent that Du Pont's power to set the price of cellophane has been limited only by the competition afforded by other flexible packaging materials. Moreover, it may be practically impossible for anyone to commence manufacturing cellophane without full access to Du Pont's technique. However, Du Pont has no power to prevent competition from other wrapping materials. The trial court consequently had to determine whether competition from the other wrappings prevented Du Pont from possessing monopoly power in violation of § 2. . . . It is inconceivable that price could be controlled without power over competition or vice versa. . . .

If a large number of buyers and sellers deal freely in a standardized product, such as salt or wheat, we have complete or pure competition. Patents, on the other hand, furnish the most familiar type of classic monopoly. As the producers of a standardized product bring about significant differentiations of quality, designed, or packaging in the product that permit differences of use, competition becomes to a greater or less degree incomplete and the producer's power over price and competition greater over his article and its use, according to the differentiation he is able to create and maintain. A retail seller may have in one sense a monopoly on certain trade because of location, as an isolated country store or filling station, or because no one else makes a product of just the quality or attractiveness of his product, as for example in cigarettes. Thus, one can theorize that we have monopolistic competition in every non-standardized commodity with each manufacturer having power over the price and production of his own product. However, this power that, let us say, automobile or soft-drink manufactures have over their trademarked products is not the power that makes an illegal monopoly. . . .

Determination of the competitive market for commodities depends on how different from one another are the offered commodities in character or use, how far buyers will go to substitute one commodity for another. For example, one can think of building materials as in commodity competition but one could hardly say that brick competed with steel or wood or cement or stone in the meaning of Sherman Act litigation; the products are too different. . . . On the other hand, there are certain differences in the formulae for soft drinks but one can hardly say that each one is an illegal monopoly. Whatever the market may be, we hold that control of price or competition establishes the existence of monopoly power under § 2. Section 2 requires the application of a reasonable approach in determining the existence of monopoly power just as surely as did § 1. This of course does not mean that there can be a reasonable monopoly. . . .

IV. The Relevant Market.—When a product is controlled by one interest, without substitutes available in the market, there is monopoly power. Because most products have possible substitutes, [we must determine what products are included in the relevant market]. . . . But where there are market alternatives that buyers may readily use for their purposes, illegal monopoly does not exist merely because the product said to be monopolized differs from others. If it were not so, only physically identical products would be a part of the market. . . . New wrappings appear, generally similar to cellophane, is each a monopoly? What is called for is an appraisal of the 'cross-elasticity' of demand in the trade.[*] The varying circumstances of each case determine the result. In

[*] [The cross elasticity of demand measures the responsiveness of the quantity demanded for a good to a change in the price of another good. That is, what is the percentage change in quantity demanded for cellophane when the price of toilet paper goes up by 1%. Negative cross elasticity denotes two products that are *complementaries*. For example, a Soda Stream device (a sparkling water maker) and Soda Stream CO2 canisters are complementaries. The demanded quantity for one would decrease when the price to

considering what is the relevant market for determining the control of price and competition, no more definite rule can be declared than that commodities reasonably interchangeable by consumers for the same purposes. . . . As respects flexible packaging materials, the market geographically is nationwide.

Cellophane differs from other flexible packaging materials, [such as] aluminum, cellulose acetate, chlorides, wood pulp, rubber hydrochloride, and ethylene gas. [The flexible packing materials on the market are similar in certain qualities and different in other qualities]. . . It may be admitted that cellophane combines the desirable elements of transparency, strength and cheapness more definitely than any of the others.

Moisture-proof cellophane is highly transparent, tears readily but has high bursting strength, is highly impervious to moisture and gases, and is resistant to grease and oils. Heat sealable, printable, and adapted to use on wrapping machines, it makes an excellent packaging material for both display and protection of commodities.

Other flexible wrapping materials fall into four major categories: (1) opaque non-moisture-proof wrapping paper designed primarily for convenience and protection in handling packages; (2) moisture-proof films of varying degrees of transparency designed primarily either to protect, or to display and protect, the products they encompass; (3) non-moisture-proof transparent films designed primarily to display and to some extent protect, but which obviously do a poor protecting job where exclusion or retention of moisture is important; and (4) moisture-proof materials other than films of varying degrees of transparency (foils and paper products) designed to protect and display.

But, despite cellophane's advantages it has to meet competition from other materials in every one of its uses. Cellophane's principal uses are [food products and cigarettes]. . . . Cellophane furnishes less than 7% of wrappings for bakery products, 25% for candy, 32% for snacks, 35% for meats and poultry, 27% for crackers and biscuits, 47% for fresh produce, and 34% for frozen foods. 75% to 80% of cigarettes are wrapped in cellophane. Thus, cellophane shares the packaging market with others. The over-all result is that cellophane accounts for 17.9% of flexible wrapping materials, measured by the wrapping surface. . . .

An element for consideration as to cross-elasticity of demand between products is the responsiveness of the sales of one product to price changes of the other. If a slight decrease in the price of cellophane causes a considerable number of customers of other flexible wrappings to switch to cellophane, it would be an indication that a high cross-elasticity of demand exists between them; that the products compete in the same market. The court below held that the "(g)reat sensitivity of customers in the flexible packaging

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other would go up. By contrast, positive cross elasticity denotes two *substitutes*. For example, packages of white printer paper produced by different manufacturers are substitutes. The demanded quantity for printer paper A would increase, when the price of printer paper B goes up. Zero cross elasticity, in turn, means that the products are neither complements nor substitutes (*e.g.*, cellophane and toilet paper)].

markets to price or quality changes' prevented Du Pont from possessing monopoly control over price." The record sustains these findings.

We conclude that cellophane's interchangeability with the other materials mentioned suffices to make it a part of this flexible packaging material market. . . .

The 'market' which one must study to determine when a producer has monopoly power will vary with the part of commerce under consideration. The tests are constant. That market is composed of products that have reasonable interchangeability for the purposes for which they are produced—price, use and qualities considered. While the application of the tests remains uncertain, it seems to us that Du Pont should not be found to monopolize cellophane when that product has the competition and interchangeability with other wrappings that this record shows.

On the findings of the District Court, its judgment is affirmed.

Affirmed.

Mr. Justice CLARK and Mr. Justice HARLAN took no part in the consideration or decision of this case.

Mr. Justice FRANKFURTER, concurring.

. . .

Mr. Chief Justice WARREN, with whom Mr. Justice BLACK and Mr. Justice DOUGLAS join, dissenting.

This case, like many under the Sherman Act, turns upon the proper definition of the market. In defining the market in which Du Pont's economic power is to be measured, the majority virtually emasculate § 2 of the Sherman Act. They admit that 'cellophane combines the desirable elements of transparency, strength and cheapness more definitely than any of' a host of other packaging materials. Yet they hold that all of those materials are so indistinguishable from cellophane as to warrant their inclusion in the market. . . .

If competition is at the core of the Sherman Act, we cannot agree that it was consistent with that Act for the enormously lucrative cellophane industry to have no more than two sellers from 1924 to 1951. . . .

NOTE: THE CELLOPHANE FALLACY

The Cellophane Fallacy refers to an error in antitrust market definition, where a market appears more competitive than it is due to analyzing prices at a monopolistic level, mistakenly assuming that high prices and elastic demand indicate strong competition.

Justice Reed's analysis in *Du Pont* is erroneous. He observed that, at the established price level of cellophane, the cross elasticity of demand for other flexible packaging materials was high, and concluded that this necessarily meant that cellophane and other flexible packaging materials were reasonably interchangeable. But when a firm takes advantage of its ability to control prices to charge high prices, any additional price increase will push consumers to other products. This analytical error is commonly known as "the cellophane fallacy."