Complaint

IN THE MATTER OF

EVELYN MILLER TRADING AS VITALIFE, ETC.

CONSENT ORDER, ETC., IN REGARD TO THE ALLEGED VIOLATION OF THE FEDERAL TRADE COMMISSION ACT

Docket 8398. Complaint, May 15, 1961—Decision, Sept. 23, 1961

Consent order requiring an individual in Cedar Rapids, Iowa, to cease making false therapeutic claims for her "Vitalife Vitamins and Minerals" in circulars, brochures, and radio commercials, as set forth in the order below.

COMPLAINT

Pursuant to the provisions of the Federal Trade Commission Act, and by virtue of the authority vested in it by said Act, the Federal Trade Commission, having reason to believe that Evelyn Miller, an individual trading as Vitalife, Vitalife Vitamins, Vitalife Products and Vital Health-Foods Co., hereinafter referred to as respondent, has violated the provisions of said Act, and it appearing to the Commission that a proceeding by it in respect thereof would be in the public interest, hereby issues its complaint stating its charges in that respect as follows:

PARAGRAPH 1. Respondent Evelyn Miller is an individual trading as Vitalife, Vitalife Vitamins, Vitalife Products and Vital Health-Foods Co., with her principal office and place of business located at 1404 First Avenue East, in the City of Cedar Rapids, State of Iowa.

PAR. 2. Respondent is now, and for some time last past has been engaged in the sale and distribution of a preparation containing ingredients which come within the classification of food, as the term "food" is defined in the Federal Trade Commission Act.

The designation used by respondent for her said preparation, the formula thereof and directions for use are as follows:

Designation: Vitalife Vitamins and Minerals

Formula:

Each capsule contains:

Vitamin B–12 (as in stroptomyces fermentation extractives)	4.0 mcg.
Vitamin A (synthetic)	6,000 U.S.P. Units
Vitamin D (irradiated Ergosterol)	1,000 U.S.P. Units
Vitamin B–1 (Thiamine Mononitrate)	20.0 mgm.
Vitamin B–2 (Riboflavin)	6.0 mgm.
Vitamin B–6 (Pyridoxine Hydrochloride)	1.0 mgm.
Vitamin C (Absorbic Acid)	100.0 mgm.
Liver Desiccated (defatted)	50.0 mgm.
Calcium Pantothenate	3.0 mgm.
Calcium (as Dicalcium Phosphate Anhydrous)	78.0 mgm.

Formula:—Continued

Each capsule contains:—Continued

Phosphorus (Dicalcium Phosphate)	54.0 mgm.
Niacinamide	30.0 mgm.
Iron (as Ferrous Sulfate Dried)	20.0 mgm.
Folic acid	.25 mgm.
Rustin	10.0 mgm.
Vitamin E (as di-alpha Tocopheryl Acetate equivalent by biological assay to)	2.5 I.U.
Glutamic Acid	12.0 mgm.
Inositol	20.0 mgm.
Choline Dihydrogen Citrate	20.0 mgm.
Potassium Iodide	0.15 mgm.
Manganese (as Manganese Sulphate Anhydrous)	0.3 mgm.
Copper (as Copper Sulfate)	0.2 mgm.
Magnesium (as Magnesium Sulfate)	0.4 mgm.
Zinc (as Zinc Sulfate)	0.08 mgm.

In a base of Brewer's Yeast

Directions:

Adults—1 capsule daily or as directed by the physician.

PAR. 3. Respondent causes the said preparation, when sold, to be transported from her place of business in the State of Iowa to purchasers thereof located in various other States of the United States and in the District of Columbia. Respondent maintains, and at all times mentioned herein has maintained, a course of trade in said preparation in commerce, as "commerce" is defined in the Federal Trade Commission Act. The volume of business in such commerce has been and is substantial.

PAR. 4. In the course and conduct of her said business, respondent has disseminated, and caused the dissemination of, certain advertisements concerning the said preparation by the United States mails and by various means in commerce as "commerce" is defined in the Federal Trade Commission Act, including, but not limited to, circulars and brochures, and by means of radio broadcasts transmitted by radio stations located in various States of the United States having sufficient power to carry such broadcasts across State lines, for the purpose of inducing, and which were likely to induce, directly or indirectly, the purchase of said preparation; and has disseminated, and caused the dissemination of, advertisements concerning said preparation by various means, including but not limited to the aforesaid media, for the purpose of inducing and which were likely to induce, directly or indirectly, the purchase of said preparation in commerce, as "commerce" is defined in the Federal Trade Commission Act.

PAR. 5. Among and typical, and illustrative, but not all-inclusive of the statements and representations contained in said advertisements disseminated as hereinabove set forth are the following:

If you tire easily, if you feel run-down or are subject to stress and strain due to a vitamin and mineral deficiency,* * * try * * * VITALIFE * * *. * * * Don't let a nutritional deficiency rob you of youthful vigor and vitality. Replenish your body with high potency VITALIFE Capsules to help you feel better, look better, sleep better.

If you * * * are subject to * * * tension due to a vitamin and mineral deficiency * * * take * * * VITALIFE and feel the difference in just a few days time!

Don't think you are getting old because you are constantly tired, weak, run-down and nervous . . . or, if you suffer from digestive distress, restless, sleepless nights, due to a lack of vitamins and minerals! Why not test * * * VITALIFE * * *!

This time of year, during changeable weather, is when those miserable colds sneak up on us! If you're tired, weak, nervous and run-down because of a vitamin and mineral deficiency, a cold can develop into something much more dangerous! * * * Take high-potency VITALIFE!

VITAMIN A—A deficiency of Vitamin A, may cause poor complexion, night blindness, rough dry skin, may reduce resistance to infections of the mucous membranes.

VITAMIN B-1—A deficiency of Vitamin B-1 (Thiamine) may cause nervousness, poor digestion, vague aches and pains, constipation, tiredness, sleeplessness, sluggish gall bladder, heart palpitation.

VITAMIN B-2—A deficiency of Vitamin B-2 (Riboflavin) may cause sore lips, sores about corners of the mouth, itching and burning of the eyes, cataracts, low vitality, tongue and mouth inflammation.

VITAMIN B-6—A deficiency of Vitamin B-6 (Pyridoxine) may cause extreme muscular weakness, leg cramps, dermatitis, certain nervous disorders.

VITAMIN B-12—A deficiency of Vitamin B-12 may cause anemic conditions, tiredness, weakness, sluggish conditions.

VITAMIN C—A deficiency of Vitamin C (Ascorbic Acid) may cause bleeding gums, rheumatic, arthritic aches and pains, muscle stiffness, brittle bones, infection, pyorrhetic conditions,* * *, weakened blood vessel walls.

VITAMIN D—A deficiency of Vitamin D may cause poor bone structure, bad teeth, calcium deficiency, rickets, arthritis.

IRON—A deficiency of Iron may cause anemia, lack of pep, energy, vitality, pale complexion, improper development of red blood cells, palpitation of the heart, & general run-down condition.

CALCIUM—A deficiency of Calcium may cause muscle soreness, headaches, rheumatic, arthritic aches and pains, nervousness, wasting, shrinking and fragility of the bones, spasms, poor teeth, low metabolism, attacks of cramping leg muscles while in bed at night.

* * *

NIACINAMIDE—A deficiency of Niacin (Niacinamide) may cause nervousness, mental inactivity, headaches, dizziness, insomnia, digestive distress, despondency.

CALCIUM PANTOTHENATE—A deficiency of Calcium Pantothenate may cause gray hair, loss of hair, inflammation of intestinal tract, certain types of nerve degeneration.

PAR. 6. Through the use of the said advertisements and others similar thereto not specifically set out herein, respondent has repre-

sented and is now representing, directly and by implication, that "Vitalife Vitamins and Minerals":

(a) Will be of benefit in the prevention and treatment of colds, sluggish gall bladder, heart palpitation, cataracts, rheumatic and arthritic aches and pains, arthritis, pyorrhetic conditions, shrinking of the bones, low metabolism, gray hair, loss of hair, inflammation of the intestinal tract and certain types of nerve degeneration.

(b) Will be of benefit in the treatment of tiredness, weakness, nervousness, nervous disorders, restlessness, sluggishness, insomnia, lack of pep, energy, vigor and vitality, mental inactivity, headache, dizziness, constipation, digestive distress, despondency, poor complexion, rough dry skin, infections of the mucous membranes, sore lips, mouth sores, bleeding gums, ocular itching and burning, inflammations of tongue and mouth, muscular weakness, leg cramps, dermatitis, muscle stiffness, infection, weakened blood vessel walls, bad teeth, pale complexion, general run-down condition, brittle bones, wasting and fragility of the bones, and spasms.

PAR. 7. The said advertisements were and are misleading in material respects and constituted, and now constitute, "false advertisements" as that term is defined in the Federal Trade Commission Act. In truth and in fact "Vitalife Vitamins and Minerals":

(a) Will not be of benefit in the prevention or treatment of colds, sluggish gall bladder, heart palpitation, cataracts, rheumatic or arthritic aches or pains, arthritis, pyorrhetic conditions, shrinking of the bones, low metabolism, gray hair, loss of hair, inflammation of the intestinal tract, or any type of nerve degeneration.

(b) Except in a small minority of persons in whom such symptoms are caused by an established deficiency of one or more of the nutrients provided by the preparation, will not be of benefit in the treatment of tiredness, weakness, nervousness, nervous disorders, restlessness, sluggishness, insomnia, lack of pep, energy, vigor or vitality, mental inactivity, headache, dizziness, constipation, digestive distress, despondency, poor complexion, rough dry skin, infections of the mucous membranes, sore lips, mouth sores, bleeding gums, ocular itching or burning, inflammations of tongue or mouth, muscular weakness, leg cramps, dermatitis, muscle stiffness, infection, weakened blood vessel walls, bad teeth, pale complexion, general rundown condition, brittle bones, wasting or fragility of the bones, or spasms.

Furthermore, the statements and representations in said advertisements have the capacity and tendency to suggest and do suggest to persons who are tired, weak, nervous, restless, sluggish, despondent and constipated, who have nervous disorders, weakened blood vessel walls, bad teeth and pale complexion, who lack pep, energy, vigor and vitality, who are mentally inactive, and who suffer from headache,

dizziness, digestive distress, insomnia, poor complexion, rough dry skin, infections of the mucous membranes and other infections, sore lips, mouth sores, ocular itching and burning, inflammations of tongue and mouth, muscular weakness, leg cramps, dermatitis, bleeding gums, muscle stiffness, brittle bones, wasting and fragility of the bones, and spasms that there is a reasonable probability that they have symptoms which will respond to treatment by the use of respondent's preparation. In the light of such statements and representations, said advertisements are misleading in a material respect and therefore constitute "false advertisements" as the term is defined in the Federal Trade Commission Act, because they fail to reveal the material fact that in the great majority of persons having any of the symptoms set out above in subparagraph (b) of PARAGRAPH SIX, none of these said symptoms is caused by an established deficiency of one or more of the nutrients provided by "Vitalife Vitamins and Minerals", and that in such cases the said preparation will be of no benefit.

PAR. 8. The dissemination by the respondent of the false advertisements, as aforesaid, constituted, and now constitutes, unfair and deceptive acts and practices, in commerce, within the intent and meaning of the Federal Trade Commission Act.

Mr. Berryman Davis for the Commission.

Frank E. and Arthur Gettleman, by *Mr. Frank E. Gettleman*, Chicago, Ill., for the respondent.

INITIAL DECISION BY RAYMOND J. LYNCH, HEARING EXAMINER

The complaint in this proceeding, issued May 15, 1961, charges the above-named respondent with violation of the provisions of the Federal Trade Commission Act.

On July 31, 1961, there was submitted to the undersigned hearing examiner an agreement between respondent and counsel supporting the complaint providing for the entry of a consent order.

Under the foregoing agreement, the respondent admits the jurisdictional facts alleged in the complaint. The parties agree, among other things, that the cease and desist order there set forth may be entered without further notice and have the same force and effect as if entered after a full hearing and the document includes a waiver by the respondent of all rights to challenge or contest the validity of the order issuing in accordance therewith. The agreement further recites that it is for settlement purposes only and does not constitute an admission by the respondent that she has violated the law as alleged in the complaint, and that the complaint may be used in construing the terms of the order.

The hearing examiner finds that the content of the agreement meets all of the requirements of Section 3.25(b) of the Rules of the Commission.

The hearing examiner having considered the agreement and proposed order, and being of the opinion that they provide an appropriate basis for settlement and disposition of this proceeding, the agreement is hereby accepted, and it is ordered that said agreement shall not become a part of the official record unless and until it becomes a part of the decision of the Commission. The following jurisdictional findings are made and the following order issued.

1. Respondent Evelyn Miller is an individual trading as Vitalife, Vitalife Vitamins, Vitalife Products, and as Vital Health-Foods Co., with her office and principal place of business located at 1404 First Avenue East in the City of Cedar Rapids, State of Iowa.

2. The Federal Trade Commission has jurisdiction of the subject matter of this proceeding and of the respondent, and the proceeding is in the public interest.

ORDER

It is ordered, That Evelyn Miller, an individual trading as Vitalife, Vitalife Vitamins, Vitalife Products and Vital Health-Foods Co., or under any other trade name or names, and respondent's representatives, agents and employees, directly or through any corporate or other device, in connection with the offering for sale, sale or distribution of the preparation designated Vitalife Vitamins and Minerals, or any other preparation of substantially similar composition or possessing substantially similar properties, whether sold under the same name or any other name, do forthwith cease and desist, directly or indirectly, from:

1. Disseminating or causing to be disseminated any advertisement by means of the United States mails or by any means in commerce, as "commerce" is defined in the Federal Trade Commission Act, which advertisement represents directly or indirectly:

(a) That said preparation will be of benefit in the prevention or treatment of colds, sluggish gall bladder, heart palpitation, cataracts, rheumatic or arthritic aches or pains, arthritis, pyorrhetic conditions, shrinking of the bones, low metabolism, gray hair, loss of hair, inflammation of the intestinal tract, or any type of nerve degeneration.

(b) That said preparation will be of benefit in the treatment of tiredness, weakness, nervousness, nervous disorders, restlessness, sluggishness, insomnia, lack of pep, energy, vigor or vitality, mental inactivity, headache, dizziness, constipation, digestive distress, despondency, poor complexion, rough dry skin, infections of the mucous membranes, sore lips, mouth sores, bleeding gums, ocular itching or

burning, inflammations of tongue or mouth, muscular weakness, leg cramps, dermatitis, muscle stiffness, infection, weakened blood vessel walls, bad teeth, pale complexion, general rundown condition, brittle bones, wasting or fragility of the bones, or spasms, unless such advertisement expressly limits the effectiveness of the preparation to those persons whose symptoms have been caused by an established deficiency of one or more of the nutrients provided by the preparation and, further, unless the advertisement clearly and conspicuously reveals the fact that in the great majority of persons these symptoms are caused by conditions other than those which may respond to treatment by the use of the preparation, and that in such persons the preparation will not be of benefit.

2. Disseminating or causing the dissemination of any advertisement by any means for the purpose of inducing or which is likely to induce, directly or indirectly, the purchase in commerce, as "commerce" is defined in the Federal Trade Commission Act, of said preparation, which advertisement contains any of the representations prohibited in paragraph 1 hereof.

DECISION OF THE COMMISSION AND ORDER TO FILE REPORT OF COMPLIANCE

Pursuant to Section 3.21 of the Commission's Rules of Practice, the initial decision of the hearing examiner shall on the 23rd day of September 1961, become the decision of the Commission; and, accordingly:

It is ordered, That the respondent herein shall, within sixty (60) days after service upon her of this order, file with the Commission a report in writing setting forth in detail the manner and form in which she has complied with the order to cease and desist.

IN THE MATTER OF

UNION CARBIDE CORPORATION

ORDER, ETC., IN REGARD TO THE ALLEGED VIOLATION OF SEC. 7 OF THE CLAYTON ACT

Docket 6826. Complaint, July 8, 1957—Decision, Sept. 25, 1961

Order requiring the nation's second biggest chemical company and largest producer of polyethylene resins used for making polyethylene film, to divest itself of the largest manufacturer of polyethylene film, formerly an important customer, which it acquired on Dec. 31, 1956, in an exchange of its stock for the acquired company's assets.

COMPLAINT

The Federal Trade Commission, having reason to believe that the party respondent named in the caption hereof, and hereinafter more particularly designated and described, has violated and is now violating the provisions of Section 7 of the Clayton Act (15 U.S.C. Sec. 18), as amended and approved December 29, 1950, hereby issues its complaint, charging as follows:

PARAGRAPH 1. Respondent Union Carbide Corporation, hereinafter referred to as Union Carbide, is a corporation organized and existing under the laws of the State of New York, with its principal office and place of business located at 30 East 42nd Street, New York, New York.

Union Carbide is the second largest chemical company in the United States and almost twice as large as the next largest chemical company in terms of sales and assets. In 1950 it had assets of $869,175,000 and sales of approximately $758,254,000. By 1956 it had assets of $1,459,748,000 and sales of approximately $1,324,506,000; percentagewise an increase of 75% in sales and 68% in assets since 1950.

Union Carbide does business worldwide, with properties and facilities throughout the United States and foreign countries. Its manufacturing and distributing facilities are divided into five major groups: (1) alloys and metals accounting for 25% of total sales; (2) chemicals, accounting for 28% of total sales; (3) electrodes, carbons and batteries, accounting for 12% of total sales; (4) industrial gases and carbides, accounting for 15% of total sales; and (5) plastics, accounting for 20% of total sales in 1956. Union Carbide is engaged in the sale and distribution of the above-named product groups, including polyethylene resins and vinyl resins, throughout the several states of the United States, in commerce, as "commerce" is defined in the Clayton Act.

Union Carbide's plastics are sold and distributed in commerce, as aforesaid, through the Bakelite Company, a division of Union Carbide. Bakelite's plant locations for the production of high-pressure polyethylene resins include plant sites at Texas City and Seadrift, Texas; Torrance, California; and at South Charleston, West Virginia. High-pressure polyethylene resins are sold and distributed by Bakelite, for various uses, to a number of processors among which are extruders engaged in the manufacture of polyethylene film, tubing and sheeting, hereinafter referred to as polyethylene film.

In 1955 Union Carbide had polyethylene resins sales of $85,481,000 which accounted for approximately 61% of the total national sales of $138,264,000 by all producers. Its polyethylene resins sales of $91,302,000 in 1956 were approximately 34% of its total plastic sales and

were greater than the sale of any other plastic resins manufactured by Union Carbide.

Union Carbide had a capacity in 1956 for the production of approximately 300,000,000 pounds of high-pressure polyethylene resins, or approximately 46% of the estimated total national capacity of 650,000,000 pounds. Its capacity for production of said polyethylene resins in 1956 was more than double that of its nearest competitor, E. I. du Pont de Nemours & Co., Inc.

PAR. 2. Visking Corporation, hereinafter referred to as Visking, a corporation organized October 27, 1925, was, prior to December 31, 1956, doing business under and by virtue of the laws of the State of Virginia, with its principal office and place of business located at 6733 West 65th Street, Chicago, Illinois.

In 1950 Visking's sales were $24,580,000 and its assets were $17,460,000. By 1956 its sales had increased to $56,022,000 and its assets had increased to approximately $38,309,000; percentagewise an increase of 128% in sales and 119% in assets since 1950.

Visking was engaged primarily in the manufacture of synthetic sausage casings and polyethylene film. Its synthetic sausage casings were sold principally to meat packers and sausage makers. The major part of its polyethylene film was sold directly to converters and a minor part to certain direct consumer industries such as the construction industry. It sold and distributed said products throughout the several states of the United States, in commerce, as "commerce" is defined in the Clayton Act.

Visking had two basic divisions, the Food Casing Division, with headquarters in Chicago, Illinois, and the Plastics Division, with headquarters in Terre Haute, Indiana. Visking had plants for the production of synthetic sausage casings and polyethylene film in the following locations:

Location	Synthetic sausage casings	Polyethylene film
United States:		
Chicago, Illinois	X	
Loudon, Tennessee	X	
Terre Haute, Indiana		X
Flemington, New Jersey		X
Fremont, California		X
Canada:		
Visking, Ltd	X	X
Dominion Viscose Products, Ltd	X	
England:		
Viskase, Ltd. (50 percent owned)	X	
British Visqueen (33 percent owned)		X
France: Viscora, S.A. (50 percent owned)	X	
Italy: Pirelli, S.p.A. (20 percent owned)		X
Brazil: Visking do Brasil (50 percent owned)	X	

Visking was the first to introduce cellulose sausage casings and its sales accounted for approximately 75% of the synthetic sausage casings sold in 1954. In 1956 it sold 12,201,000 pounds of cellulose sausage casings valued at $25,591,000; it also sold approximately 858,000 pounds of plastic sausage casings valued at $1,498,000. Visking has been the largest producer of polyethylene film for several years. Its sales of polyethylene film in 1956 accounted for approximately 40% of total national sales. In 1956 it sold approximately 47,830,000 pounds of polyethylene film valued at approximately $27,000,000.

PAR. 3. In 1956 Union Carbide's sales accounted for over 50% of the high-pressure polyethylene resins sold in the United States. It was also a major producer of vinyl and other plastics. Its sales of polyethylene resins had increased from approximately $85,482,000 in 1955 to $91,302,000 in 1956 and its total shipments had increased by 33,045,370 pounds over 1955. It was the principal supplier of polyethylene resin to extruders of polyethylene film. It had approximately nine competitors engaged in the manufacture and sale of polyethylene resins.

In 1956 Visking sold approximately 65% of the synthetic sausage casings and approximately 40% of the polyethylene film sold in the United States. Its sales of synthetic sausage casings were $27,089,000 and its total shipments were 13,059,000 pounds in 1956. Its sales of polyethylene film were approximately $27,000,000 and its total shipments were approximately 47,830,000 pounds in 1956. Substantially all synthetic sausage casings are manufactured from regenerated cellulose. Some are manufactured from plastics, such as polyethylene and vinyl. Polyethylene film is manufactured from polyethylene resin. Visking had two competitors in the manufacture and sale of cellulose sausage casings, both of whom operated under a licensing arrangement with Visking. It had approximately fifty competitors engaged in the manufacture and sale of polyethylene film. Six of these competitors were licensed by Visking under a uniform licensing agreement to manufacture polyethylene film.

In addition to the aforesaid licensing arrangements which Visking had with certain of its competitors, it held a royalty-free non-assignable license from Union Carbide for the production, use and sale of vinyl film, sheeting, rods, tubes and monofilaments. Visking had also granted Union Carbide a license to certain patents regarding the manufacture and use of plastics as it had or might get at any future date. Visking further had contracted with Union Carbide for the conduct of a development and testing program on such synthetic resins as might be submitted to it by Union Carbide for commercial suitability tests. During 1956 Union Carbide made payments of

$300,000 to Visking in connection with their research and patent development contract, and $250,000 under their patent license agreement.

In 1955 Visking's purchases of polyethylene resin amounted to 41,820,000 pounds valued at approximately $16,326,000, of which approximately 82% or 35,116,000 pounds valued at $13,434,000 were purchased from Union Carbide. In 1956, 47,953,000 pounds valued at $18,031,000 of Visking's total polyethylene resin requirements of 52,127,000 pounds valued at $19,965,000 were purchased from Union Carbide.

On January 1, 1955, Union Carbide entered into an agreement with Visking providing for discounts on polyethylene resin purchased on the following scale:

Quantity (Pounds)	*Discounts (Percent)*
0–4 million	0
4–8 million	4
8–14 million	7
14–22½ million	8½
22½ million and over	10

Visking was the only polyethylene film extruder purchasing polyethylene resin from Union Carbide in quantities sufficient to qualify for discounts of 7% or more under this schedule. Similar agreements were not entered into by Union Carbide with its other customers engaged in the manufacture of said film.

PAR. 4. On September 14, 1956, Union Carbide and Visking entered into a memorandum agreement providing for the purchase of Visking by Union Carbide. On that date the stock which Union Carbide agreed to exchange for Visking's assets was valued at about $102,437,000 and Visking's stock was valued at about $85,364,000. On or about December 31, 1956, Union Carbide acquired all, or substantially all, of the assets of Visking by exchanging about 864,449 shares of its stock for the business and assets of Visking. Visking is presently operated as Visking Company, a division of Union Carbide.

PAR. 5. The effect of the aforesaid acquisition of Visking by Union Carbide may be substantially to lessen competition or to tend to create a monopoly in the manufacture, sale and distribution of polyethylene resin, polyethylene film, and synthetic sausage casings in the United States within the meaning of Section 7 of the Clayton Act, as amended.

The probable aforesaid effects may include the following, among others:

1. Union Carbide, the largest producer of polyethylene resin, by acquiring Visking, the largest producer of polyethylene film, extended its business in such a manner as may substantially increase its position

in the manufacture, sale and distribution of polyethylene resin and film; and it may exercise the inherent powers of its acquired position to substantially lessen competition or to tend to create a monopoly in the manufacture, sale and distribution of polyethylene resin or polyethylene film.

2. This acquisition has the effect of lessening actual or potential competition by foreclosing or tending to foreclose other manufacturers of polyethylene resin from a substantial share of the market for polyethylene resin.

3. As the principal source of supply for polyethylene resin and as the principal competitor of other polyethylene film extruders, Union Carbide has acquired a position whereby it may manipulate prices or use other means to lessen competition or tend to create a monopoly.

4. This acquisition may eliminate or restrict opportunities which extruders of polyethylene film have to influence the supply or price of said product, or to engage in independent market behavior contrary to the interest of Union Carbide.

5. This acquisition may preclude or limit entry of actual or potential competitors in the manufacture and sale of polyethylene film.

6. The acquisition of Visking, the dominant manufacturer and distributor of synthetic sausage casings, by Union Carbide, a company which has a much greater financial, research, and resource position, may tend to lessen competition and exclude actual or potential competitors from entering the synthetic sausage casing business.

7. Union Carbide, in acquiring Visking, has eliminated any potential competition between itself and Visking in the manufacture, sale or distribution of polyethylene resin, polyethylene film, or synthetic sausage casings.

PAR. 6. The foregoing acquisition, acts and practices of respondent, as hereinbefore alleged and set forth, constitute a violation of Section 7 of the Clayton Act (15 U.S.C. Sec. 18) as amended and approved December 29, 1950.

Messrs. J. Wallace Adair and *David J. McKean* for the Commission;

Kelley, Drye, Newhall & Maginnes, by *Messrs. Joseph H. Smith, William E. Huth, Francis S. Bensel, Milton Handler, Stanley D. Robinson* and *Kenneth J. Jones*, New York, N.Y., for respondent.

INITIAL DECISION BY ABNER E. LIPSCOMB, HEARING EXAMINER

A. THE COMPLAINT AND ANSWER

1. The complaint in this proceeding was issued on July 8, 1957, charging the respondent corporation with violating § 7 of the Clayton

Act (15 U.S.C. § 18), as amended, by acquiring "all or substantially all" of the assets of the Visking Corporation. Specifically, the complaint alleges that the effect of the acquisition may be substantially to lessen competition or to tend to create a monopoly in the manufacture and sale of three products, namely: (a) polyethylene resins, which were and are manufactured and sold by Union Carbide; (b) polyethylene film, which was manufactured and sold by the Visking Corporation, and (c) synthetic sausage casings, which were also manufactured and sold by the Visking Corporation. The part of the Clayton Act upon which the complaint is based provides that

> . . . no corporation subject to the jurisdiction of the Federal Trade Commission shall acquire the whole or any part of the assets of another corporation engaged also in commerce, where in any line of commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly.

An answer was submitted by Respondent on September 25, 1957, which in general denies the material allegations of the complaint.

B. HEARINGS IN SUPPORT OF THE CASE-IN-CHIEF

2. Hearings in support of the case-in-chief commenced on November 12, 1957, and were held before the late Hearing Examiner Frank Hier in New York, Philadelphia, Chicago, and Washington, D.C., on various days in November and December, 1957, and in March, 1958. Counsel supporting the complaint rested their case-in-chief on March 21, 1958.

C. THE MOTION TO DISMISS THE COMPLAINT AND RULINGS THEREON

3. On May 12, 1958, the Respondent, prior to presenting any defense, submitted to the late Hearing Examiner Hier a motion to dismiss the complaint. The motion averred that counsel in support of the complaint had failed to present prima facie evidence that regenerated cellulose sausage and meat casings, polyethylene film and polyethylene resin each constitutes a line of commerce or relevant market within the meaning of § 7 of the Clayton Act, as amended; and further, that regardless of how lines of commerce or relevant markets might be defined, counsel supporting the complaint had failed to present prima facie evidence that the effect of Respondent's acquisition constituted a violation of § 7 of the Clayton Act, as amended.

4. On August 19, 1958, the late Hearing Examiner Hier issued an order and opinion granting in part and denying in part Respondent's motion to dismiss the complaint. He ruled, in substance, as follows:

(1) That a prima facie case had been developed that high-pressure process polyethylene resin sold for film extrusion purposes constituted

a line of commerce or relevant market and that there existed a reasonable probability that competition may be lessened in such market by reason of the acquisition of the Visking Corporation by the Union Carbide Corporation;

(2) That polyethylene film is sold and used in substantial quantities in five fields, namely: flexible packaging, agricultural, construction, industrial, and decoration; there is a reasonable probability that competition may be lessened in the relevant market of polyethylene film sold to and used by the converters for flexible packaging; but that counsel supporting the complaint has made out no such prima facie case as to the polyethylene film sold for agricultural, construction, industrial and decorative purposes. Accordingly, the motion to dismiss was denied as to polyethylene film sold for flexible packaging purposes, but granted as to polyethylene film used for the four other purposes named above; and

(3) That a prima facie case has been established that regenerated cellulose sausage and meat casings constitute a line of commerce or relevant market, but that counsel supporting the complaint had failed to establish a prima facie case of a reasonable probability that the acquisition in question may substantially lessen competition or tend toward a monopoly in that line of commerce, and the motion to dismiss the complaint as to that charge was granted.

No appeal was taken from the above-described order.

D. HEARINGS FOR THE RESPONDENT AND PROPOSED FINDINGS

5. Thereafter, Respondent presented its defense, hearings being held in November, 1958, and in January, February, April and June, 1959, until they were halted on June 10, 1959, by the accidental death of Hearing Examiner Hier. On June 18, 1959, the present hearing examiner was assigned to hear this proceeding in lieu of Hearing Examiner Hier, and by order dated July 23, 1959, he adopted in substance the above-described order granting in part and denying in part Respondent's motion to dismiss the complaint herein.

6. Subsequently, further hearings were held on behalf of the Respondent in August, September and November, 1959, and in January, February and March, 1960. Respondent rested its defense on March 1, 1960, and counsel supporting the complaint presented rebuttal in May and June. A short surrebuttal hearing was held in Washington, D.C., on June 17, 1960, and the record was then closed for the reception of evidence. The record contains more than 9,100 pages of transcript, over 1,200 exhibits, and numerous proposed findings as to facts and proposed conclusions. Opposing reply briefs were submitted on November 30, 1960.

E. THE ACQUIRING CORPORATION—UNION CARBIDE CORPORATION, A CORPORATION

7. The Respondent Corporation, sometimes hereinafter referred to as Union Carbide, is a corporation organized and existing under the laws of the State of New York, with its principal office and place of business located at 30 East 42nd Street, New York, New York.

8. Union Carbide is the second-largest chemical company in the United States, with properties and facilities located in various parts of the country. In 1950 it had assets of $869,175,000 and sales of approximately $758,254,000. By 1956 it had acquired assets of $1,459,748,000, including the assets of The Visking Corporation, and had increased its sales to approximately $1,324,506,000, including the net sales of The Visking Corporation.

9. Union Carbide's business is divided into seven major groups of products, as follows: (1) alloys and metals; (2) carbon products; (3) chemicals; (4) industrial gases and carbides; (5) plastics; (6) nuclear products, and (7) consumers' products, such as Prestone and Trex anti-freezes, Eveready flashlight cases and batteries, and Pyrofax bottled gas. Approximately ten percent of its total sales in 1957 consisted of such consumer products. Respondent's various operating activities are carried on through numerous corporate divisions and subsidiaries, which in 1957 were substantially as follows:

Electro Metallurgical Co.: Produces more than 100 different alloys and alloying metals for use in making steel, cast-iron and nonferrous metals, also silicon metal and high-silicon alloys. These products are added to metals while molten to cleanse them of impurities and impart desirable properties, such as strength, toughness, and resistance to wear, heat and corrosion. Chromium alloys, for instance, make steel "stainless." The Division also produces calcium carbide, sold by Linde Company for use in making acetylene;

Haynes Stellite Co.: Produces a wide variety of special alloy metals designed to withstand extreme heat, corrosion and wear;

Union Carbide Ore Co.: Procures domestic and foreign ores used by the corporation for metallurgical and other purposes;

Union Carbide Chemicals Co.: Produces more than 400 synthetic organic chemicals, such as ethylene oxide, ethanol, isopropanol; the ethanolamines; acrylonitrile, a major starting material for new synthetic fibers; hydroxyethyl cellulose ("Cellosize") widely used in paints and emulsions; and others, which enter into every important branch of industry;

Union Carbide Olefins Co.: Produces and sells ethylene and other related products that are used in the preparation of organic chemicals;

Silicones Division: Produces a large number of various chemical specialties and industrial chemicals, including raw materials for silicone metal, and silicone products;

National Carbon Company: Produces a wide range of carbon and graphite products used in essentially every segment of industry;

Kemet Company: Primarily engaged in the manufacture and sale of barium getters and other devices used in the manufacture of vacuum tube grids, and other materials for the electronics industry;

Linde Company: Principally engaged in the extraction of various gases from the air and the sale of these industrial gases, together with the equipment necessary for their use;

Bakelite Company: Sells many different formulations based on each of the four major types of plastics: polyethylene, vinyl, phenolic, and styrene; also two new types, epoxies and silicones;

Visking Company: Produces synthetic food casings and plastic films, used in packaging processed meat and sausage products and in manufacture of skinless frankfurters, and polyethylene film for flexible packaging material under the trade-mark "Visqueen";

Pyrofax Gas Corporation: Markets portable cylinders of liquefied gas for consumer use, and gas appliances utilizing this gas;

Union Carbide Canada Limited: Has six divisions operating 39 plants and sales offices throughout Canada;

Union Carbide Development Company: Promotes the overall growth and expansion of the corporation;

Union Carbide International Company: Handles export sales of Corporation products and represents the Corporation for numerous affiliated producing and selling companies abroad; and

Union Carbide Nuclear Company: Has more than 100 uranium mines in Colorado; capacity for processing uranium ores in Colorado and Utah, 2,400 tons per day. Operates the Atomic Energy Commission's production and development installations at Oak Ridge, Tennessee, and Paducah, Kentucky.

10. It must be remembered that, although Union Carbide and its various divisions and subsidiaries manufacture many and varied products, the only ones with which we are directly concerned herein are polyethylene resin, which has been continuously manufactured and sold by Union Carbide since prior to its acquisition of The Visking Corporation, and polyethylene film and synthetic sausage casings, which were manufactured and sold by The Visking Corporation, but not by Union Carbide, prior to that acquisition.

F. THE ACQUIRED CORPORATION—THE VISKING CORPORATION

11. The Visking Corporation, hereinafter sometimes referred to as Visking, was incorporated in the State of Virginia on October 27, 1925, and prior to its acquisition by Union Carbide on December 31, 1956, was doing business by virtue of such incorporation, with its principal office and place of business located at 6733 West 65th Street, Chicago, Illinois.

12. In 1950 Visking had assets valued at $17,460,000, with sales for that year of $24,580,000. By 1956, the year of the acquisition in question, its assets had increased to approximately $38,309,000 and its yearly sales to $56,022,000; percentagewise, an increase of 119% in

assets and 128% in sales since 1950. As observed by the late Hearing Examiner Hier, "It, too, has a dynamic and aggressive history—".

13. Visking was engaged primarily in the manufacture of two products, namely, synthetic sausage casing and polyethylene film. Its synthetic sausage casings were sold principally to meat packers and sausage makers. Its polyethylene film was manufactured from polyethylene resin, a large amount of which it purchased from Union Carbide. Visking sold its film directly to converters and to end users, and distributed its products throughout the several states of the United States in commerce, as "commerce" is defined in the Clayton Act, as amended.

14. Visking had two basic divisions, the Food Casing Division, with headquarters in Chicago, Illinois, and the Plastics Division, with headquarters in Terre Haute, Indiana. Its plants for the production of synthetic sausage casings in this country were located in Chicago, Illinois, and in Loudon, Tennessee. Its plants for the production of polyethylene film in this country were at Terre Haute, Indiana, Flemington, New Jersey, and Fremont, California.

G. THE ACQUISITION OF VISKING BY UNION CARBIDE

15. As of December 31, 1956, Union Carbide acquired substantially all of the property, assets, good will and business as a going concern of The Visking Corporation in exchange for 864,449 shares of Union Carbide common stock, pursuant to the provisions of a Plan and Agreement of Reorganization, dated November 21, 1956, and a memorandum agreement, dated September 14, 1956, between Union Carbide and Visking. On November 21, 1956, based on the closing price for the day on the New York Stock Exchange ($105.125 per share), of which judicial notice is taken, the value of said Union Carbide shares was approximately $90,875,201. The Plan of Reorganization also provided for the assumption by Union Carbide of Visking's liabilities, the prompt dissolution of Visking and the distribution of Union Carbide stock to the stockholders of Visking according to their respective interests. In the course of the reorganization the Visking stockholders in effect exchanged their stock in Visking for stock in Union Carbide at the rate of one share of Union Carbide voting stock for each 2.5 shares of Visking stock held by them.

16. Since January 1, 1957, the properties and business acquired by Union Carbide pursuant to the approved Plan of Reorganization have been operated as a division of Union Carbide under the name of the Visking Company Division of Union Carbide Corporation.

H. LINES OF COMMERCE

17. As we have previously observed, § 7 of the Clayton Act prohibits the acquisition of one corporation by another "—where in *any line of commerce* in *any section of the country*, the effect of such acquisition may be substantially to lessen competition or to tend to create a monopoly". The questions at once arise: What is meant by "line of commerce" and "section of the country"?

18. The words "section of the country" obviously refer to the geographical area in which a line of commerce moves in trade. In the present case, we are fortunate in having no conflict between counsel as to the meaning of the phrase "section of the country", because all counsel recognize that Respondent's products are bought and sold throughout the United States. Accordingly, we may look anywhere in the United States for the effects of the acquisition upon the relevant lines of commerce.

19. In common parlance, the phrase "line of commerce" signifies a commodity or class of commodities which is bought and sold in trade among the several states. It is difficult, however, if not impossible, in a case such as this, to find or formulate an authoritative definition of "line of commerce" which is, at the same time, broad enough to satisfy the demands of Respondent's counsel, and narrow enough to satisfy Government counsel.

20. As might be expected, we have herein a sharp difference of opinion on the part of counsel as to the criteria to be employed in determining the scope of the relevant lines of commerce. For example, does the line of commerce of basic resins include all basic resins, or is it limited to those basic resins and compounds manufactured and sold for film-extrusion purposes only? Also, is the line of commerce including polyethylene limited to polyethylene film manufactured and sold for flexible-packaging purposes only, or does that line of commerce include all flexible-packaging products, regardless of the material of which they may be made?

21. The problem of selecting satisfactory criteria for determining the scope of a relevant line of commerce was discussed in some detail by the late Hearing Examiner Hier in his ruling on Respondent's motion to dismiss the complaint herein. He compared the two Supreme Court decisions which are generally referred to as the *Cellophane Case* and the *duPont-General Motors Case* [*U.S.* v. *E. I. duPont de Nemours*, 351 U.S. 377 (1956) and 353 U.S. 586 (1957)]. He pointed out that the *Cellophane Case*, wherein the Court defined a line of commerce "in terms of reasonable interchangeability for which [the products] are produced—price, use and qualities considered", was a pro-

ceeding under the Sherman Act and, as a result, the issue was whether an actual monopoly existed, rather than whether there was a reasonable threat of monopoly. This fact, he asserted, caused the Court to employ a broad, liberal test for determining the relevant line of commerce. The *duPont-General Motors Case*, he pointed out, involved the merger of two corporations under § 7 of the Clayton Act, a proceeding in which the issue was not whether there was actual monopoly shown, but merely whether there was a reasonable probability that monopoly might result from the merger. This fact, he asserted, resulted in the use of a less broad and less liberal test than that applied by the Court in the *Cellophane Case*, i.e.,

> . . . automobile finishes and fabrics have sufficient peculiar characteristics and uses to constitute them products sufficiently distinct from all other finishes and fabrics to make them a "line of commerce" within the meaning of the Clayton Act.

From this comparison Hearing Examiner Hier concluded that

> Study of these two cases, apart from the small avalanche of commentary which immediately followed the latter, lead me after considerable mental travail to the conclusion that the two cases are antithetical in approach and philosophy and that duPont-General Motors is controlling here.

22. Counsel supporting the complaint herein maintain Hearing Examiner Hier's conclusion, and base thereon their contentions regarding the scope of the relevant lines of commerce here involved. Counsel for the Respondent, however, take the contrary position, and assert that "The key language in *duPont-General Motors* is simply a verbal variant of the *Cellophane* formulation * * *". They state in fact that:

> The most comprehensive discussion of this question to date appears in Judge Herlands' recent decision in *United States* v. *Columbia Pictures Corp.* [Trade Reg. Rep. (1960 Trade Cas.) Par. 69,766 (S.D.N.Y. 1960)], where he sustained the legality under Section 7 of an acquisition by Screen Gems, a Columbia subsidiary, of rights to distribute Universal's pre-1948 feature films to television. In so holding, the court ruled that the pertinent line of commerce was not limited to the distribution of feature films to television stations, as claimed by the Government, but that it encompassed all forms of television programing material. In the course of its opinion, the court stated:
>
> "To determine whether or not there is a reasonable probability of a substantial lessening of competition, Section 7 of the Clayton Act demands an examination into economic realities. *All competition must be considered, including competition faced by the product in question from other products.*
>
> "The tests enunciated by the authorities are consistent. Effectively, the test 'reasonable interchangeability for the purposes for which (the products) are produced—price, use and qualities considered,' and the test 'sufficient peculiar characteristics and uses to constitute them products sufficiently distinct . . . to make them a "line of commerce" within the meaning of the Clayton Act' are but *different verbalizations of the same criterion.*

"They require the same accumulation and scrutiny of facts and application of judgment. *The task is to find the area of effective competition. The 'characteristics and uses' formulation does not limit the court's inquiry to physical attributes and foreclose inquiry into the competitive situation.*"

23. The Commission in the matter of *Brillo Company, Inc.*, Docket No. 6557 (May 23, 1958), in discussing the tests for determining the scope of a line of commerce, stated:

The test * * * is whether these products are shown by the facts to have such peculiar characteristics and uses as to constitute them sufficiently distinct from others to make them a "line of commerce" within the meaning of the Act. *United States* v. *E. I. duPont deNemours & Co.*, 353 U.S. 586 (1957). That the acquired and acquiring corporations both made industrial steel wool was only one circumstance to be considered. Additional factors which could have been taken into account include data relating to the manner in which the products are marketed, their physical characteristics, prices and possibly other things bearing on the question of whether or not *they may be distinguished competitively from other wares.* * * * [T]he mere fact that articles other than steel wool are marketed for industrial use as abrasives is not adequate legal warrant for including all abrasive products in the relevant line of commerce. * * *.

The Commission, in the case of *Reynolds Metals Company*, a corporation, Docket No. 7009, reiterated the idea expressed in the *Brillo* opinion, that additional factors to be considered in defining a line of commerce " * * * included data relating to the manner in which the products were marketed, the physical characteristics, prices and possibly other things bearing on the question of whether or not they may be distinguished competitively from other wares." The Commission further concluded that—

It is clear that while a "line of commerce" may include an entire industry such as "the iron and steel industry," it may also be confined to a lesser portion of the whole industry. *United States* v. *Bethlehem Steel Corporation* [168 F. Supp. 576 (1958)]. In any such instance, the practices in the industry are of great significance. Each case requires an examination of its own particular facts before a determination can be made.

24. In the opinion of the Hearing Examiner, it is not necessary, for the purpose of defining "line of commerce" in this proceeding, to consider whether the legal approach and philosophy which determined the scope of the "line of commerce" in the Sherman Act *Cellophane Case* "is antithetical in approach and philosophy to that which determined the line of commerce in the duPont-General Motors § 7 decision." It is sufficient, we think, that the Commission has stated, in substance, that the appropriate test for defining the line of commerce, in a proceeding such as this, is to determine whether the products which counsel contends should be included in such line of commerce are shown by the evidence to have such peculiar characteristics and uses as to constitute them sufficiently distinct from other products

to make them a "line of commerce" within the meaning of the Act. At the same time, according to the Commission, we should also consider data relevant to the manner in which the products are marketed, their physical characteristics and prices, and whether the products manufactured by the merged corporations are distinguishable competitively from each other and from other competitive products. In other words, we must examine and evaluate the competitive realities as they exist and as they may have resulted from the acquisition in question.

I. POLYETHYLENE RESINS—LINES OF COMMERCE

25. As previously observed, the complaint alleges that an effect of the acquisition in question might be substantially to lessen competition or to tend to create a monopoly in the manufacture, sale and distribution of polyethylene resins. Early in this proceeding, however, counsel supporting the complaint contended, and now contend, for the recognition of an additional line of commerce consisting of film-grade polyethylene resins—the grade of polyethylene resins actually sold to manufacturers of polyethylene film.

26. Polyethylene resin is a thermoplastic material produced from the hydrocarbon, ethylene gas, by the polymerization, or linking together in chain-like form, of ethylene molecules to form polyethylene molecules. This linking together is accomplished by subjecting the ethylene gas to high temperatures and pressures in the presence of a catalyst which initiates and speeds the reaction of ethylene with itself to form polyethylene.

27. Ethylene gas, the starting raw material for the process, is a colorless gas which is one of the constituents of natural gas, and can be obtained therefrom by refining, or as a by-product gas from petroleum-refining operations. In making polyethylene resin, ethylene gas of high and rigidly-controlled purity is first liquefied. Next it is compressed to an intermediate pressure, above that of the original ethylene gas, but below the final pressure used. At this intermediate pressure point the catalyst, and a chain transfer agent or a diluent, if any is used, are introduced. The ethylene is then compressed to a much higher pressure, and heated. The combination of heat, pressure, and catalyst causes the ethylene to react with itself and to polymerize to form polyethylene.

28. The polyethylene formed under these conditions flows to a separator, where the unreacted gas is removed and recycled. The polyethylene is then extruded into thin ribbons or strands, which are cooled, solidified and then cut into ⅛-inch cubes, granules, or pellets, known as "basic resins".

29. The manufacturing process is continuous, with liquefied, compressed ethylene gas being fed into one end of a reactor, while the mixture of polyethylene and unreacted ethylene gas is withdrawn from the other end. Since the pressures used are in excess of 1,000 atmospheres, or approximately 15,000 pounds per square inch, the reaction equipment is necessarily strong and heavy in order to withstand such tremendous forces. Union Carbide has about forty resin-producing units. These units produce one particular resin for several days at a time without switching to another resin with different characteristics. Since 1956 Union Carbide has operated its resin plants 365 days per year, 24 hours a day.

30. Polyethylene was developed by the Imperial Chemicals Industry, commonly referred to as ICI, in England in about 1933. The method of manufacture employed by ICI involved the application of extremely high pressures in the polymerization of ethylene gas. Consequently resin produced by the ICI process is frequently referred to as "high pressure process" polyethylene resin.

31. Union Carbide began the production of polyethylene resins in about 1942 under an immunity from the ICI patents granted to it during the war by the United States Government. After the war, duPont became the exclusive licensee of ICI in the United States, and a non-exclusive sub-license was extended by duPont to Union Carbide from 1946 to 1952. In 1952 Union Carbide secured a license directly from ICI, which continued until the ICI patents expired in 1956.

32. From April, 1943 until November, 1954 Union Carbide and duPont were the only manufacturers of polyethylene resin in the United States. In November, 1954, Eastman Kodak commenced the manufacture of such resins. In 1955 five more companies entered the field—Dow Chemical Company, Koppers Company, Inc., Monsanto Chemical Company, National Petro-Chemical Corporation (now a subsidiary of National Distillers and Chemical Corporation and known as United States Industrial Chemicals Company or "U.S.I."), and Spencer Chemical Company. At the present time all eight companies are manufacturing and selling polyethylene resin.

33. Polyethylene resin is manufactured and sold for nine principal uses or materials, as follows:

a. *Injection Molding.* Common houseware articles such as tumblers, bowls and wastebaskets are typical injection-molded articles;

b. *Blow Molding.* Squeeze bottles and other narrow-neck containers illustrate the products made by this process;

c. *Wire and Cable Covering.* A large number of different types of wire and cable serving the electronics and communications field are coated with a protective covering of polyethylene;

d. *Pipe Extrusion.* Polyethylene pipe is used to transport water and corrosive liquids for various purposes;

e. *Contour Extrusion.* A monofilament, or strand, of polyethylene is one of the principal contour-extruded products. Monofilaments are used to make such things as polyethylene rope;

f. *Calendering.* Heavy gauge polyethylene sheeting is produced by calendering. The sheeting may be used to produce, among other items, pressure-sensitive tapes employed as pipe wraps, electrical insulation and other such protective covering functions;

g. *Non-Extrusion Coating.* Polyethylene-wax mixtures are used as a non-extrusion coating on milk cartons, bread wrappers, freezer paper and other similar items;

h. *Extrusion Coating.* Paper and paperboard extrusion-coated with polyethylene are used in a variety of packaging applications, such as multi-wall shipping bags; and

i. *Film Extrusion.* Polyethylene film is used as a flexible packaging material in various forms, including bags and sheets for wrapping purposes. It is also used in a large number of agricultural, building and construction, industrial, and consumer goods.

34. Polyethylene resin possesses three properties which determine the physical characteristics of the products manufactured from the resin. These are:

(a) Melt index, or average molecular weight,
(b) Density, and
(c) Molecular weight distribution.

Variations in these properties are built into polyethylene resins by regulating the operation controls of pressure, temperature, reaction time, catalyst, and, if used, chain-transfer agents or diluents.

(a) *Melt index* is the measure of the rate of flow of molten polyethylene under certain standard test conditions. This rate bears an inverse relationship to the average molecular weight of polyethylene. The higher the rate of flow, or melt index, the lower the average molecular weight and vice versa. Melt index, or average molecular weight, has a bearing on the ease with which resin may be processed. The higher the melt index (or the lower the average molecular weight), the less viscous is the molten resin. Viscosity affects the rate of speed at which polyethylene resin can be processed into an end product. Melt index is also significant in relation to the strength of products manufactured from polyethylene. The higher the melt index, or the lower the molecular weight, the weaker the product.

(b) *Density* is the standard unit volume of a material. With polyethylene this is usually represented as grams per cubic centimeter. High pressure process polyethylene resin (also known as low density

resin) ranges in density from .910 to .945. Variations in density affect the stiffness, the melting temperature, the permeability to liquids and gases and the impact strength of products made from the resin.

(c) *Molecular weight distribution* refers to the spread or distribution in the resin of molecules of various molecular weights. There is no reliable analytical method for accurately determining molecular weight distribution. It may be roughly classified, however, as broad or narrow, based on empirical test data. At a given melt index, resins of a broad molecular weight distribution process more easily than resins of narrow molecular weight distribution. Molecular weight distribution has an effect on film clarity, low temperature brittleness and stress-cracking resistance.

Union Carbide tests representative samples of polyethylene resin, after it has been pelletized, to determine the quality of a particular lot of resin. Lots that meet the same performance specifications are blended together by mechanical means. The finished basic resin, then ready for commercial use, may be shipped directly to customers, to warehouses for inventory, or it may be further processed by hot processing or compounding. Hot processing improves the homogenity of a resin; it does not change the chemical composition of a basic resin or its density; it does not change the melt index to any significant extent; it may change, slightly, the molecular weight distribution. As the Examiner visually observed, hot processed resins have the same appearance, size, color, and form as basic polyethylene resins. The principal additives employed by Union Carbide in compounding are colorants and blacks, anti-oxidants, slip agents and anti-block agents. Colorants impart color to the end products; blacks are used principally to add weather resistance to polyethylene pipe, wire covering and film used for agricultural purposes. Anti-oxidants protect the resin, or the end product, from oxidation by exposure to air. Slip agents reduce friction between layers of film, extrusion-coated substrates or nested molded items; they also improve machinability of film and mold release in injection molding. Anti-block agents reduce the tendency of two layers of film to cling together. Compounding results in only a physical mixture of the basic resin and the additive or additives; it does not change the chemical composition or the density of a basic resin; it does not change the melt index to any significant extent; it may change, slightly, the molecular weight distribution of a basic resin. As observed by the Examiner, most compounds have the same appearance, size, color and form as basic polyethylene resins, unless colorants or blacks are added.

35. Although basic resins are occasionally sold for film extrusion without the addition of additives, by far the greater amount of resins sold for film extrusion is specifically selected and compounded. Re-

spondent contends that such additives do not change the physical nature of resins. The evidence convinces me, however, that the selection of basic resins, combined with the use of additives, constitutes the process by which the product is fitted for its intended end use, in this instance film extrusion.

36. Visking has itself recognized, in contract negotiations with customers, the above-discussed distinctions between different types of basic resins, by referring to prices for film-grade resins, and the record shows that it bought only such resins. Respondent, in its proposed findings, refers to Visking's use of the term "film-grade resin" as a colloquialism, asserting that "the term film-grade resin is used colloquially among film resin producers and film extruders as a shorthand method of describing purchases by film extruders". We agree. Colloquialisms, however, arise to describe articles or practices already established and sufficiently distinct from other articles or practices to need a special designation. The existence of a colloquial term, such as "film-grade resin", indicates the existence of a specific product different enough from other similar products to need a distinctive name. One does not coin a word, and then search for or invent something for the word to mean. Such terms arise, rather, in response to the need for a specific designation for some article or practice which words already in common use fail to designate precisely. It may well be said that the existence of a colloquialism is consequent to and must be predicated on the prior existence of the specific article or practice which it was devised to designate.

37. It should also be observed that Respondent's film-grade resins are sold by highly-trained salesmen who "know how these materials act in his [the customer's] particular end use". Another characteristic of film-grade resin is the fact that it takes a distinct know-how successfully to produce and sell quality film-grade resins. Hearing Examiner Hier observed:

> And even though Dow Chemical, no growing boy in chemical and technical know-how, is a resin manufacturer competing in the sale thereof with respondent, its film extruding subsidiary, Dobeckmun, purchased the great majority of film grade resins from respondent, because "we cannot take standard resins, generally speaking, and use them in their present state. We must have, to get maximum efficiencies from our equipment and top quality film, adjustments in the standard formulation to get it through our equipment".

38. Based upon the reliable, probative and substantial evidence, it is our conclusion that polyethylene resins sold for film-extrusion purposes have sufficient peculiar characteristics and uses to constitute them products distinct from other polyethylene resins to make them a "line of commerce" within the meaning of the Clayton Act.

J. THE PROBABLE EFFECT OF THE ACQUISITION ON THE FILM-GRADE RESINS LINE OF COMMERCE

39. The next question to be resolved is whether the acquisition in question may substantially lessen competition or tend to create a monopoly in the line of commerce consisting of film-grade resins. In 1956 about 33⅓% of all domestic shipments of resins went to film extruders. By 1958, that percentage had risen to approximately 40.8%, and in 1959 to approximately 43%. During those years Union Carbide manufactured and shipped not only the largest amount of polyethylene resin produced by any manufacturer in this country for film-extrusion purposes, but also the largest amount of polyethylene resins for all purposes. The following table shows the amount of high-pressure process polyethylene resins, the type of resin with which we are here principally concerned, produced and shipped for domestic purposes by polyethylene manufacturing companies in 1956, 1958 and 1959, and the proportion thereof consisting of film-grade resin shipped for film-manufacturing purposes.

1956

[1,000 pounds]

Company	Total domestic shipments	Domestic shipments for film	Shipments to own film-making units
Union Carbide	188,159	77,057	----
Du Pont	82,992	26,005	36
U.S.I.	37,794	14,675	----
Spencer	33,158	2,111	----
Eastman	17,259	3,845	----
Dow	12,927	202	----
Monsanto	11,635	4,128	----
Koppers	8,973	1,655	1,629
Total	392,897	129,678	1,593
Shipments for film as a percent of all domestic	----	33.0	----
Shipments for film to own units as a percent of all film shipments	----	----	1.2

1958

[1,000 pounds]

Company	Total domestic shipments	Domestic shipments for film	Shipments to own film-making units
Union Carbide	251,302	133,237	68,277
Du Pont	94,000	18,446	46
U.S.I.	72,400	32,200	14,914
Spencer	35,310	9,200	----
Eastman	26,938	9,135	----
Dow	30,908	7,560	1,825
Monsanto	28,273	11,971	----
Koppers	22,633	7,269	7,252
Total	561,764	229,018	92,314
Shipments for film as a percent of all domestic	----	40.8	----
Shipments for film to own units as a percent of all film shipments	----	----	40.3

1959

[1,000 pounds]

Company	Total domestic shipments	Domestic shipments for film	Shipments to own film-making units
Union Carbide	302, 740	153, 109	72. 381
Du Pont	109, 800	20, 000	3. 900
U.S.I.	105, 128	50, 835	30, 876
Spencer	43, 500	13, 750	----------
Eastman	45, 156	24, 087	----------
Dow	56. 597	22, 831	8. 060
Monsanto	38, 232	18, 300	----------
Koppers	26, 846	9, 883	8. 872
Total	727, 999	312, 795	124, 089
Shipments for film as a percent of all domestic	----------	43. 0	----------
Shipments for film to own units as a percent of all film shipments	----------	----------	39. 7

40. In 1956 Koppers, Union Carbide's smallest competitor, was the only manufacturer who was producing film from its own polyethylene resins. In that year, however, Union Carbide acquired Visking, and by 1958 a number of its competitors had likewise acquired film-extruding plants as outlets for their production of resins. As we have previously observed, based on 1956 figures, Union Carbide's acquisition of Visking integrated the largest polyethylene-film extruder with the largest domestic-resins manufacturer. The U.S.I.-Kordite Consolidated acquisition integrated the second-largest film maker with the fastest-growing domestic resin producer. The Dow-Dobeckmun acquisition brought together the fourth-largest film extruder and the sixth-largest resin manufacturer. The following table shows the relevant details of these various acquisitions:

1956

Resin manufacturer	Film manufacturer acquired	Date of acquisition	Domestic shipments of resin by acquiring company (1,000 pounds)	Purchases of resin by acquired company (1,000 pounds)
Koppers	Durethene Corp	October 1955	8, 973	8, 134
Union Carbide	Visking Corp	December 1956.	188, 159	51, 526
U.S.I.	Kordite Co	August 1958	37, 794	8, 452
Dow	Dobeckmun Co	August 1957	12, 927	8, 696
Dow	Extruders, Inc	April 1958	----------	3, 937
Monsanto	Plax Corp. (50% interest)[1]	November 1957.	11, 635	1, 434
Total			259, 488	82, 179
Percent			100	32

[1] Discontinued manufacture of film in October 1958.

41. Although the legality of the acquisitions set forth in the table is not subject to question here, they are relevant as part of the pattern of concentration shown to have existed for some years in the poly-

ethylene-resin industry. The table indicates that in 1956 the film-extruding companies acquired by polyethylene-resin manufacturers purchased approximately 32% of all domestic resins shipped by those manufacturers. Both Dobeckmun and Kordite were integrated into film-conversion, or the manufacture of polyethylene film into end products, at the time each was acquired. In that connection it should be observed that Visking has also recently entered the film-conversion business. It is evident that such entry by Visking into that business is simply the latest of a series of integrations, the end result of which has been the expansion of Union Carbide until it embraces within itself, independently, all the processes necessary to the entire basic-resin industry, from the manufacture of polyethylene resin to film-grade basic resin to film extrusion to film-conversion into the end product.

42. In 1956 the resin manufacturers shipped 129,678,000 pounds of polyethylene resins to film extruders. By 1959, these shipments had increased to 312,795,000 pounds. Approximately two-thirds of this increase, which amounted to about 141%, was accounted for by the increase of resin shipments by manufacturers to their own newly-acquired film extruders.

43. Respondent's share of the total shipments from 1956 to 1959 declined from 59.42% to 48.95%. Of the increase in the amount of resin shipped during those years, however, Union Carbide accounted for 76,000,000 pounds, or 41.5% of the total increase. It appears, therefore, that during this period the smaller manufacturers expanded more rapidly than did Union Carbide; but nevertheless, Union Carbide, whose rate of growth was already stabilized, obtained a substantial proportion of the overall increase of polyethylene resins shipped. U.S.I., the second-largest shipper of film-grade resins, in 1959 showed an increase of about 36,000,000 pounds, accounting for about 19.8% of the total increase in polyethylene resins shipped. The following table shows the total amount of polyethylene film-grade resins shipped by the various manufacturers during the years 1956, 1958 and 1959:

Company	1956		1958		1959	
	1,000 pounds	Percent of total	1,000 pounds	Percent of total	1,000 pounds	Percent of total
Union Carbide	77,057	59.42	133,237	58.18	153,109	48.95
Du Pont	26,005	20.05	18,446	8.05	20,000	6.39
U.S.I.	14,675	11.32	32,200	14.06	50,835	16.25
Spencer	2,111	1.63	9,200	4.02	13,750	4.40
Eastman	3,845	2.96	9,135	3.99	24,087	7.70
Dow	202	.16	7,560	3.30	22,831	7.30
Monsanto	4,128	3.18	11,971	5.23	18,300	5.85
Koppers	1,655	1.28	7,269	3.17	9,883	3.16
Total	129,678	100.00	229,018	100.00	312,795	100.00

44. Union Carbide, when it acquired Visking, acquired the power to remove from the market and allocate to itself exclusively the purchasing power of the largest single customer in the market for film-grade polyethylene resins. In 1956, Visking reportedly purchased about 51½ million pounds of resins, which was about 39.7% of all the resins shipped by resin manufacturers to film extruders in that year. In 1958, Visking purchased over 75 million pounds, or an increase of about 23 million pounds over its 1956 purchases. The amount of this increase was greater than the 1958 total resin shipments made by each of six of the resin manufacturers to film extruders, excepting Union Carbide and U.S.I. In 1959 Visking purchased nearly 84 million pounds of resin, an amount almost equal to the combined shipments of 84.8 million pounds to film extruders by duPont, Spencer, Dow, Monsanto and Koppers.

45. The increased production of polyethylene resins hereinabove shown has been accomplished by large, well-established chemical companies, and not by new entrants into the field. In fact, the probability of such new entrants obtaining a foothold in this field is slight. Mr. Turner, President of Union Carbide Plastic Company, testified that the cost of constructing the smallest efficient plant for the manufacture of polyethylene resins, with an annual capacity of 25 million pounds, would be, as of January 1, 1957, approximately nine or nine and a half million dollars. In addition, he expressed the opinion that it would take two years to construct such a plant, and about two years, after commencing operation, to train its staff to sell polyethylene resins competitively. It is clear, therefore, that in the face of these difficulties, only large, well-established corporations, experienced in chemical manufacture and amply financed, would have any prospect of successful entry into the polyethylene resin field.

46. The facts and figures which we have examined show that commerce in all polyethylene resins, and particularly in film-grade polyethylene resins, is substantial. Respondent's share of the market in 1956 was slightly under 60%, almost three times that of its nearest competitor. In 1959, Respondent's share of the market, although it had declined to slightly under 50%, was still very great. Thus, Respondent was at the time of the acquisition, and still is, the major factor in the polyethylene resin market, and particularly in the polyethylene film-grade resin market. We have seen further that quantitatively the Respondent, the largest producer of polyethylene resins, has acquired the largest purchaser of such resins, and has the power to exclude the seven other producers of polyethylene resins from the substantial segment of the buying market represented by Visking. The suppressive effect of such exclusion upon competition is obvious.

47. We have seen that entry into the polyethylene-resin market by any but a giant corporation is financially and technically almost impossible. The acquisition of technique, equipment, and personnel in this field is costly in both time and money. The late Hearing Examiner Hier aptly observed:

> Further, respondents point to the fact that Visking is purchasing resins from respondent's competitors in increasing proportions. But this is beside the point, which is that by the acquisition respondent acquired the power to shut them out—it is the power that counts, not its exercise. As long as the power is there, it may be exercised—that such exercise may be benevolent or sportsmanlike this year is no guarantee that it may not be anti-competitive next. There would probably be no antitrust laws if society had not long since learned that foreclosure power, in private hands, bent on private profit, could not be trusted.

Upon the basis of the reliable, probative and substantial evidence in the record, we conclude that there is a reasonable probability that the effect of Union Carbide's acquisition of Visking may be substantially to lessen competition or tend to create a monopoly in the manufacture and sale of polyethylene film-grade resins.

48. It is further concluded that, regardless of whether the relevant line of commerce be considered to be polyethylene film-grade resin only, or polyethylene resin for any and all uses, the effect of the acquisition of Visking by Union Carbide may be substantially to lessen competition or tend to create a monopoly in the acquiring corporation.

K. POLYETHYLENE FILM, A FLEXIBLE PACKAGING MATERIAL

49. Our next problem arises from the allegation in the complaint that polyethylene film constitutes a line of commerce in which competition might be lessened by the acquisition in question. Respondent, in its answer, denies that polyethylene film constitutes a relevant market, alleging that Visking has been and Union Carbide is subject to substantial and effective competition, not only from other manufacturers of polyethylene film, but also from numerous manufacturers of other flexible packaging materials, such as cellophane, paper, metal foils and other wrappings, both coated and uncoated. Respondent further alleges that such other flexible packaging materials have the same end use as polyethylene film, are functionally interchangeable with it, and are acceptable substitutes therefor, in the same relevant market. Respondent contends, therefore, that the relevant line of commerce should not be confined to polyethylene film, but should be expanded to include a vast number of other flexible-packaging materials. Obviously, in such an expanded line of commerce the effect of the acquisition would be minimized and more difficult to discern.

50. Polyethylene film, which is made from polyethylene resins and compounds, is a stiff, strong, plastic film varying in thickness. Since

no material other than the resin or resin compound enters into its manufacture, the cost of resins represents a large percentage of the cost of the finished film. Although there are several methods of extruding polyethylene film, the most generally used is the "blown film" process, which was developed and patented by Visking. By this process, hot resin is extruded through a ring-shaped die into the form of a continuous tube. Compressed air is injected through the die into the tube, and the tube is blown up somewhat like a balloon or bubble. This expanded bubble of film is cooled and passed between rollers, which flatten it. Some of such film is sold as tubing, which is thereafter made into bags and other products; while other film is sold in flat sheets.

51. The late Hearing Examiner Hier found in his opinion on Respondent's motion to dismiss the complaint herein, as we observed earlier in this opinion, that polyethylene film is sold and used in substantial quantities in five markets, namely: flexible packaging, agricultural, industrial, construction, and decoration or needle-work products. He further found, however, that only in the flexible-packaging market had a prima facie case been developed establishing a reasonable probability that competition might be lessened by reason of the acquisition. We have concurred in that finding, and consequently we are now only concerned with polyethylene film manufactured and sold for flexible packaging.

52. The principal areas of use for polyethylene film as a flexible-packaging material are as follows: (1) fresh produce, (2) candy, (3) dried foods, (4) baked goods, (5) meat, poultry and fish, (6) soft goods, (7) dry-cleaner and laundry, (8) household, (9) hardware and automotive, (10) toys, sporting goods and novelties, (11) paper products, and (12) garden supplies. The use of polyethylene film in each of the above areas of end use is substantial.

53. Respondent contends that polyethylene film is in competition in the flexible-packaging industry with various other materials, the names of which, including polyethylene film, with the approximate dates of their first use for flexible-packaging purposes, are listed by Respondent as follows:

* * * kraft and sulphite paper—1908; aluminum foil (usually combined with another material or coated)—1928; cellophane—1928; glassine—1933; cellulose acetate—1933; mesh—1933; Pliofilm—1938; vinyl—1943; polyethylene—1948; Saran and Cryovac—1948; Mylar—1955; polystyrene—1957.

54. Respondent has presented extensive evidence and many exhibits showing that many and varying articles are wrapped in various materials, as well as in polyethylene film. Respondent contends, therefore, that all flexible-packaging materials are in competition with each other and with polyethylene film. In a measure, this is of

course, true. The problem of wrapping things has been with us a long time, and the use of polyethylene film as a wrapping material is very recent. Since its introduction into the market, however, about 1943, the demand for it as a wrapping material has steadily increased.

55. The desirable characteristics inherent in polyethylene film have resulted in its quick acceptance as a packaging material, and its use has become widespread. Polyethylene film has a certain degree of elasticity, and under sudden impact will resist rupture. In the thinner gauges it can be made very clear and transparent. The film is limp and has a soft texture. It is almost completely inert chemically. It is easily sealable to itself, so that various kinds of packages and bags can be readily fabricated from it. It will take printing. It is waterproof, and to a high degree even impervious to water vapor. Visking has prepared a chart for use in selling polyethylene film, which shows the distinctive physical characteristics thereof as compared with certain other flexible-packaging products. This chart is apparently based on Respondent's belief in the particular qualities of polyethylene film as distinct from the qualities of other flexible-packaging materials.

56. In addition to the unique characteristics and uses of polyethylene film which Respondent has recognized and proclaimed in its advertising, Respondent's pricing practices show that the primary competition involving its patented "Visqueen" polyethylene film is between that film and the polyethylene films of competitors, rather than between "Visqueen" and other types of wrapping material. Mr. Bernard, one of Respondent's officials, testified that in November, 1959, Visking met any price reduction by polyethylene film manufacturers such as Chippewa and Plastic Horizons. In fact, he testified in that connection that "upward of 50%" of Visking's shipments of polyethylene film for flexible-packaging purposes was being billed to customers below "the price of Visking's published list as a result of meeting competition". In addition, we observe that Visking claimed that its polyethylene film " * * * is the outstanding leader in quality, uniformity and strength", thus intensifying its competition with other polyethylene films rather than with possible substitutes therefor. For a period in 1959, about 50% of Visking's polyethylene film was sold, not according to a published price list, but at a price reduced to meet the exigencies of competition offered by other polyethylene film manufacturers. From this fact, it would appear that Visking recognized that it was engaged in a line of commerce consisting of polyethylene film, rather than in a line of commerce involving flexible-packaging material generally.

57. Another factor which shows that in the sale of polyethylene film Respondent has been competing primarily with other film manu-

facturers rather than with manufacturers of all types of flexible-packaging material is service and delivery. The tenor of Respondent's witnesses' testimony was that certain competitors, such as Durethene, Plastic Horizons and Chippewa, could give faster delivery of polyethylene film, and in smaller amounts, than could the Respondent, and that, therefore, some polyethylene film business was lost to Respondent's competitors. It appears, therefore, that this competition centered upon polyethylene film, not upon other flexible-packaging materials, such as paper and foil.

58. From our consideration of the reliable, probative and substantial evidence in the record, we conclude that polyethylene film manufactured and sold for flexible-packaging purposes possesses sufficient peculiar characteristics and uses to constitute, and that it does constitute, a line of commerce distinct from any line of commerce which includes other flexible-packaging materials, within the intent and meaning of the Clayton Act.

M. PROBABLE EFFECT OF ACQUISITION ON POLYETHYLENE FILM LINE OF COMMERCE

59. We must now consider whether the acquisition in question may substantially lessen competition or tend to create a monopoly in the line of commerce consisting of polyethylene film manufactured for flexible-packaging purposes.

60. In 1956 there were approximately sixty companies engaged in extruding polyethylene film, which shipped a total of approximately 113,544,064 pounds of film to customers. Of this total, Visking shipped 45,673,417 pounds, or 40.23% of such shipments, by far the largest production by any one manufacturer in that year. In fact, Visking's poundage exceeded the total of the next ten largest companies by over 1,800,000 pounds. The company ranking second in this market accounted for about 6.5% of the total, or about one-sixth of Visking's shipments. Forty of the sixty companies in this market each shipped less than one million pounds of film, and collectively accounted for about 7.4% of the total. In this connection it should be observed that Visking has continued to grow in a very substantial manner. From January, 1956, to June, 1960, Visking purchased a total of 56 film-extruding machines, with an aggregate yearly capacity of almost 108,000,000 pounds. These new machines of Visking's are capable of making more film than was shipped by all the rest of the industry in 1956.

61. Although the record does not contain figures for total polyethylene film shipments for flexible packaging, or the amount of such shipments by Visking for 1958 or 1959, the Respondent estimates that

Visking's share of the total sales of polyethylene film for flexible-packaging purposes was 24.38% in 1958, and 19.22% in 1959. If these estimates be correct, Visking's share of the market has obviously decreased percentagewise since the year of the acquisition. It must be observed, however, that such a relatively small decrease in total market share has not changed Union Carbide-Visking's position as the leader in the industry, nor substantially lessened the mutual competitive advantages gained by that acquisition.

62. In 1960 Visking began converting a part of its film into garment bags. Respondent contends that this in no sense makes Visking a significant converter of film into finished products. However that may be, the fact that Visking is now a converter of at least a part of its own film is certainly significant. As a completely-integrated company transforming ethylene gas to resins, resin to film, and film to finished products, Union Carbide, by its acquisition of Visking, has acquired the power to shield itself from the economic pressure of competition in the film-grade resin market, with the inevitable result that Union Carbide has gained thereby a distinct advantage over its smaller competitors in the sale of its polyethylene film products.

63. The machines necessary for entry into the film-extrusion business cost from about $16,000 to about $68,000, depending upon size and capacity. In view of the rather large number of entrants into this relatively new field, it appears, however, that entry therein is rather easy, but, judging from the various complaints of the new entrants, success in meeting the competition therein is not so easy. It appears that the principal inducement for entry into the film-extrusion business has been the immediate and substantial consumer acceptance of polyethylene film as a wrapping material.

64. Between January 1, 1955, and March 5, 1957, Visking has made five announced price reductions on film. Mr. Schechter, President of Chester Products, testified that his company's price change of January 11, 1956, was made specifically to meet Visking's prices. He testified that "We met the Visking price list." Mr. Albert Moss, President of Extrudo-Film, when asked why his price list showed the same prices as Visking's, replied, "* * * The reason is that we have always been forced to follow Visking's price." Mr. Kelleher of Durethene and Mr. Voskian, Vice-President of Polyplastic Products, Inc., testified to the same effect.

65. Dr. Lecky, product manager of polyethylene resins for the duPont Company, was asked about that company's June, 1956, price reduction. He replied, "It was the result of pressure from a number of our customers for a price concession to put them in a more competitive position with the price concession which they felt Bakelite was giving to Visking."

66. Respondent, during its defense, presented evidence showing that at times a number of its competitors sold polyethylene film at off-list prices and at prices below those of the Respondent. Such evidence does not, however, alter the fact that the polyethylene film industry has been consistently sensitive to changes in Visking's prices, and has responded to such changes by changing its own prices accordingly, every time Visking has announced a price change. It therefore appears that Visking's prices set the standard for the industry, and, except in a few special instances, the smaller polyethylene film manufacturers are compelled to accept that standard and to adapt their own prices to the fluctuating ceiling so established by Visking.

67. It appears that the acquisition of Visking by Union Carbide has increased Union Carbide's economic power over both film-grade resins and polyethylene film—to the extent that, if exercised, that power can substantially affect competition in both lines of commerce. As the late Hearing Examiner Hier aptly stated, Union Carbide—

> * * * has acquired the power to act independently of its competitors price-wise. In at least one sales bulletin, issued coincidentally with a film price reduction, Visking brags: "We plan to continue to remain as the leader in this industry." It is able to substantially lower its costs * * * and is in a position to squeeze, if it chooses, the margins of independents * * * to their costs in many cases.

68. In the light of the reliable, substantial and probative evidence in this record, we conclude that the acquisition of Visking by Union Carbide may be substantially to lessen competition or tend to create a monopoly in the manufacture and sale of polyethylene film for flexible-packaging purposes.

N. DISMISSAL OF THE COMPLAINT AS TO SYNTHETIC SAUSAGE CASINGS

69. The complaint alleges that the effect of the acquisition of Visking by Union Carbide may be substantially to lessen competition or tend to create a monopoly in the manufacture, sale and distribution of synthetic sausage casings. Upon the completion of the Government's case-in-chief, this allegation was dismissed by the late Hearing Examiner Hier. Under the Commission's Rules of Practice, when a Hearing Examiner dismisses a complaint in part in the course of a proceeding he "* * * shall enter his ruling on the record and take it into account in his initial decision". The reasons for this dismissal, as ably presented by the late Hearing Examiner Hier, are as follows:

> The last issue is whether Visking's other line of business—synthetic sausage casings—constitutes a "line of commerce" adversely affected by the acquisition. An official of Visking first conceived the idea of a synthetic, as opposed to animal tissue casing, as a competitor thereof and a substitute therefor. What was desired was a casing of uniform predetermined thickness, width and length,

permeable to smoke, and made of domestic raw materials which are normally in plentiful supply. Such a casing was first produced by Visking in 1926 made of cellulose derived from cotton linters, water and glycerine, seamless and transparent, permeable to smoke, stable in the presence of heat, water, meat juices and curing agents, nontoxic, with the strength to withstand handling and stuffing strains, yet elastic enough to stretch and shrink with the meat and adhere closely thereto. The entire process was patented by Visking.

The competitive and financial success of this new product, [versus] animal tissue casings, was steady and striking. Thus, by 1956, Visking's sales of this product were in excess of 12,000,000 pounds valued at $25,591,000, or about 60 percent of all such casings sold domestically.

The record, however, shows that the term "synthetic sausage casings" includes not only those described above, namely from regenerated cellulose, but also casings made from nitrocellulose, plastic film, such as polyethylene, vinyl and Saran, and from cellophane, all of which Visking did and does produce. However, Visking itself has represented to the public that its regenerated cellulose meat casings are unique from others—"there is no other material now in sight which has the necessary qualities," and "regenerated cellulose sausage casings alone satisfy the above requirements" of strength, smoke permeability, nontoxicity, stability, flexibility, adherence to the meat, low weight, size uniformity, printability. The record shows that regenerated cellulose sausage casings, [versus] all other sausage or meat casings, are made from different basic ingredients, by far different processes, have a number of unique characteristics, the chief one being smoke permeability and removability thereafter. * * * The conclusion is that the relevant market here is that consisting of sausage and meat casings of whatever size made of regenerated cellulose under the patented processes used by the Visking Corporation.

Is it reasonably probable that the acquisition will substantially lessen competition or tend toward a monopoly in this market? This acquisition in this field is entirely conglomerate—respondent was neither a supplier to, nor a competitor of, Visking in this line of commerce. There has therefore been no removal of a competitive unit from the market, nor any power acquired to exclude suppliers to, or purchasers from it.

Visking had a monopoly in this field by reason of patent protection until some years ago when it licensed American Viscose Corporation, and TeePak, Inc. to use these patents and they became competitors in this market. Neither, however, were substanital as compared with Visking—sales of the latter accounting for about 60 percent of the market, quantitatively, in 1956. The market is substantial, amounting to over 30 million dollars in 1956, and Visking's share thereof was likewise substantial. However, the patents whose protection gave Visking its former monopoly, and then protected its position as the dominant member of the subsequent oligopoly, expired in December 1957, so that the field is now open to one and all. There is no evidence whatever of what entry into this market would cost, financially, technically or distributively. Consequently, I cannot assume that the Visking leadership will continue. At least two competitors have their feet in the door, one rather firmly, and have the set-up to manufacture and market now. One, American Viscose Corporation, is no financial pygmy and the other's business has shown increases.

The complaint alleges that the acquisition has eliminated any potential competition between respondent and Visking in this market. Of course there never was any actual competition and I can find nothing whatever in the record to suggest that any was ever contemplated.

* * * While past competitive conduct of the acquiring corporation furnishes at best an unsteady footing from which to prognosticate such conduct in the future with the newly acquired unit, it is some help in forecasting the future state of competition in the new line of commerce. None of that is here. All that is here essentially, is that in this market two commercial strangers have united and the product of one, sausage casings, now has the financial backing of a billion and a half dollars of assets (1957) instead of something less than 100 million formerly, and that, ergo, this financial power can be used to drive everyone else out of the market. Such a forecast on this loose and spotty record calls for a temerity and clairvoyance which I do not possess. The verdict is a Scotch one—not proved, and accordingly the motion to dismiss this portion or charge of the complaint is well taken and will be granted.

O. RULINGS ON PROPOSED FINDINGS OF FACT, PROPOSED CONCLUSIONS AND PROPOSED ORDERS

70. Consideration has been given to the entire record herein, including the proposed findings as to the facts, proposed conclusions of fact and of law, proposed orders, and briefs and reply briefs in support thereof. All these documents, although written from the viewpoint of the advocate, have been helpful to the hearing Examiner. Counsel for the Respondent has vigorously requested separate rulings on each proposed finding. In the opinion of the Hearing Examiner, such a detailed ruling is unnecessary because it would not contribute substantially to the clarity of the initial decision, and would, at the same time, overburden the decision with a lengthy discussion of evidentiary details. Therefore, those proposals which have been accepted have been, in substance, incorporated herein, and all proposals not so incorporated are hereby rejected.

P. SUMMARY OF CONCLUSIONS

71. The acquisition of Visking by Union Carbide, except for the line of commerce which includes synthetic sausage casings, as herein found, constitutes a violation of § 7 of the Clayton Act (15 U.S.C. § 18), as amended and approved December 29, 1950.

Q. THE SCOPE OF THE ORDER

72. Counsel supporting the complaint contends that an order of divestiture should issue herein, which should have the effect of restoring Visking to its former competitive position as a manufacturer and seller of both polyethylene film and synthetic sausage casings. Counsel further contends that Union Carbide should be divested of the new polyethylene film plant which it built at Cartersville, Georgia, subsequent to the acquisition.

73. Counsel for the Respondent, on the other hand, contend that if any order of divestiture is issued, it should be limited to those assets

now being used by the Visking Division of Union Carbide for the exclusive purpose of producing polyethylene film for flexible-packaging purposes, and should not include assets used for extruding polyethylene film for other purposes, nor should it include the new film-extrusion plant recently built at Cartersville, Georgia. Futhermore, they contend that such an order of divestiture should not include the assets, including plants, devoted exclusively to the manufacture of synthetic sausage casings, the acquisition of which was herein found to be lawful.

74. The evidence shows that Visking, prior to its acquisition by Union Carbide, operated three self-contained and separately-functioning film-manufacturing plants, one in the East, one in the Midwest, and one in the Far West. The evidence also shows that the new film-extrusion plant built by Union Carbide at Cartersville, Georgia, subsequent to the acquisition was assigned to and operated by the Visking Division of Union Carbide. The evidence further shows that Visking's synthetic sausage and meat casings have been produced in two separate plants having no direct connection with Visking's polyethylene film business. It is apparent from these facts that the new facilities at Cartersville, Georgia, are a Visking asset, under Visking management, and represent simply Visking's normal expansion. As such, these facilities should be retained by Visking as a necessary part of its equipment to meet competition after it is restored to its former status of independent manufacturer of polyethylene film. It is equally apparent that, aside from the new plant at Cartersville, to order the separation of assets used to manufacture polyethylene film for flexible-packaging purposes from those used to manufacture such film for other purposes would be impracticable, and would result in a serious competitive crippling of the restored Visking Corporation.

75. We believe, however, that Visking can be successfully reestablished as a competitive entity in the polyethylene film manufacturing business without its former synthetic sausage casing manufacturing plants and business. Furthermore, we believe that an order of divestiture should not be broader than necessary to accomplish the purpose embodied in § 7 of the Clayton Act, which is to prevent injury to competition in commerce.

R. THE ORDER

It is ordered, That the Respondent, Union Carbide Corporation, a corporation, through its officers, directors, agents, representatives, and employees, shall divest itself absolutely, in good faith, of all assets, properties, rights and privileges, tangible and intangible, including but not limited to all plants, machinery, equipment, trade names, trade-

marks, good will and business acquired by Union Carbide Corporation as a result of its acquisition of the assets of The Visking Corporation, together with the new polyethylene film manufacturing plant built at Cartersville, Georgia, subsequent to such acquisition, and so much of the plant machinery, buildings, improvements and equipment, of whatever description, as has been installed or placed by Union Carbide Corporation on the premises of Visking Company Division of Union Carbide Corporation, as may be necessary to restore Visking Company Division of Union Carbide Corporation to its former status as The Visking Corporation, a competitive entity in the polyethylene film industry, as organized and in substantially the basic operating form in which it existed at or about the time of the acquisition, with such additional assets as may represent the normal expansion of The Visking Corporation during the time of its operation as a division of Union Carbide Corporation.

It is further ordered, That in such divestment no property above mentioned to be divested shall be sold or transferred, directly or indirectly, to anyone who at the time of the divestiture is a stockholder, officer, director, employee, or agent of, or otherwise directly or indirectly connected with or under the control or influence of, Respondent or any of Respondent's subsidiaries or affiliated companies.

It is further ordered, That the complaint herein, insofar as it relates to the manufacture, offering for sale, sale and distribution of synthetic sausage casings, be, and the same hereby is, dismissed.

Opinion of the Commission

By Dixon, Commissioner:

This is an action brought under Section 7 of the amended Clayton Act.[1] Both parties have appealed the initial decision of the hearing examiner filed February 7, 1961.

On December 31, 1956, respondent Union Carbide Corporation acquired substantially all of the assets of one of its principal customers, The Visking Corporation. The acquisition was effected by an exchange of one share of Union Carbide common stock for 2.5 shares of Visking stock. The 864,449 shares of Union Carbide stock exchanged had a market value of approximately $90,875,201 as of No-

[1] The pertinent wording of the Section provides:

That no corporation engaged in commerce shall acquire, directly or indirectly, the whole or any part of the stock or other share capital and no corporation subject to the jurisdiction of the Federal Trade Commission shall acquire the whole or any part of the assets of another corporation engaged also in commerce, where in any line of commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly.

vember 21, 1951, the date of the formal merger agreement. The separate corporate entity of Visking has not been maintained and since January 1, 1957, it has operated as a division of the acquiring company under the name Visking Company Division of Union Carbide Corporation.

The Commission's complaint, issued July 8, 1957, charged that the acquisition was unlawful in that its effect may be to lessen competition or tend to create a monopoly in the manufacture and sale of three products, polyethylene resin, polyethylene film and synthetic sausage casings. After answer, extensive hearings were held in varoius cities throughout the United States. The transcript of the proceedings covers more than nine thousand pages. The record contains 352 exhibits received in support of the complaint and 849 exhibits received in opposition thereto. Briefs, motions and proposed findings comprising many additional hundreds of pages have been filed.

Counsel for the complaint rested the case-in-chief on March 21, 1958, and on May 12, 1958, prior to presenting any evidence, respondent filed a motion to dismiss. The motion argued that counsel for the complaint had failed to make a *prima facie* showing that regenerated cellulose sausage and meat casings, polyethylene resin and polyethylene film each constituted a "line of commerce" as those words are used in Section 7, and further, that regardless of the "line of commerce" definition there had been a failure of proof as to the proscribed adverse effects of the merger. In an order dated August 17, 1959, the hearing examiner ruled that the sausage and meat casings produced by Visking, composed of regenerated cellulose, are sufficiently unique from all others to constitute a line of commerce, but that it had not been proved that the acquisition of this part of Visking's business would have the proscribed effects in the relevant market. The hearing examiner also held that no *prima facie* case had been made out of reasonable probability of an adverse effect in four of the five principal markets for polyethylene film, namely agriculture, construction, industrial and decoration. With respect to the fifth use of polyethylene film, flexible packaging and with respect to polyethylene resin as the basic ingredient of polyethylene film, he ruled that a *prima facie* case had been made out. Thus at that juncture in the proceeding a substantial portion of the complaint was dismissed and the respondent was obligated to defend only two principal charges:

(1) that the acquisition may lessen competition or tend to create a monopoly in a line of commerce consisting of high pressure process polyethylene resin sold for film extrusion purposes; and

(2) that the acquisition may lessen competition or tend to create a monopoly in a line of commerce consisting of polyethylene film for flexible packaging purposes.

While both parties were dissatisfied with the hearing examiner's ruling on the motion to dismiss, neither took interlocutory appeals to the Commission. Respondent rested its defense on March 1, 1960. Several rebuttal and surrebuttal hearings were then held and the record was closed for the presentation of evidence on June 17, 1960. On February 7, 1961, the hearing examiner filed his initial decision containing an order requiring respondent to completely divest itself of the polyethylene film business acquired from Visking, together with a new film manufacturing plant built in Cartersville, Georgia, after the acquisition, and any other property or assets as may represent the normal expansion of Visking during its period of operation as a part of Union Carbide. The initial decision reaffirmed the earlier dismissal of the complaint with respect to synthetic sausage casings.

As noted above, both parties have appealed the hearing examiner's decision. Respondent, of course, would have us vacate the order of divestiture in its entirety. Counsel supporting the complaint urges only that the dismissal of the sausage casing charge be reversed and that Union Carbide should be ordered to relinquish this business as well as the acquired polyethylene film facilities. We will consider first the appeal by respondent.

The products with which this matter is now principally concerned are polyethylene film and its basic ingredient, polyethylene resin. Polyethylene is produced from ethylene gas obtained as a by-product of petroleum refining operations or refined from natural gas. The basic resin is produced by applying great pressure and heat to ethylene gas in liquid form. The resultant resin is extruded into thin ribbons which, when cooled and solidified, are cut into one-eighth inch cubes. This is the form in which the resin is then sold to extruders for further processing.[2]

Polyethylene was developed and patented by a British chemical company in the early 1930's. Early in World War II Union Carbide, at the request of the United States Navy and with its financial assistance, began production of polyethylene resin for use as an insulation material in coaxial cables for high frequency radar. At about this same time, E. I. duPont deNemours and Co. also entered the field.

---

[2] Polyethylene resin produced by this method is known as high pressure process resin to distinguish it from resin produced by a more recently developed low pressure process. Low pressure process polyethylene resin is a distinctly different product and has different uses than the high pressure process resin with which we are here concerned. Hereinafter wherever the term polyethylene resin appears it refers to high pressure process polyethylene resin.

From April, 1943, until November, 1954, Union Carbide and duPont were the only United States manufacturers of polyethylene resin. There are at present eight producers of these resins in the United States.

Polyethylene film is one of many products produced from polyethylene resin. The method of manufacture is known as the hot melt extrusion process. Polyethylene resin pellets are conveyed under pressure by a screw through a heated barrel causing the resin to become molten. It is then forced through a die and solidified by cooling into a thin film which is placed on rolls. The film is extruded in two basic forms depending upon the die used. If an annular die is used the film takes the form of a tube; if a flat die is used the film appears as a sheet. Sheeting is also produced by slitting polyethylene tubing as it is extruded. Both tubing and sheeting are sold for flexible packaging purposes.

Union Carbide is the country's second largest chemical company with assets, at the time of the acquisition, of approximately $1,421,439,536. Its business is divided into five major groups: alloys and metals; chemicals; electrodes, carbons and batteries; industrial gases and carbides; and plastics. Consolidated net sales for the calendar year 1956, not including sales of Visking, were approximately $1,279,235,725. Approximately 20% of its 1956 sales were accounted for by the plastics group which includes polyethylene resin, the basic raw material of polyethylene film. Sales of polyethylene resins and compounds in 1956 were approximately $91,302,000. In 1956 Union Carbide was far and away the country's largest producer of polyethylene resins. The relative position of Union Carbide in the polyethylene resin manufacturing industry is illustrated by the following tables:

TOTAL DOMESTIC SHIPMENTS OF POLYETHYLENE RESINS

Company	1956		1958		1959	
	1,000 pounds	Percent	1,000 pounds	Percent	1,000 pounds	Percent
Union Carbide	188,159	47.9	251,302	44.7	302,740	41.6
Du Pont	82,992	21.1	94,000	16.7	109,800	15.1
U.S.I.	37,794	9.6	72,400	12.9	105,128	14.4
Spencer	33,158	8.4	35,310	6.3	43,500	6.0
Eastman	17,259	4.4	26,938	4.8	45,156	6.2
Dow	12,927	3.3	30,908	5.5	56,597	7.8
Monsanto	11,635	3.0	28,273	5.1	38,232	5.2
Koppers	8,973	2.3	22,633	4.0	26,846	3.7
Total	392,897	100.0	561,764	100.0	727,999	100.0

DOMESTIC SHIPMENTS OF POLYETHYLENE RESIN TO FILM EXTRUDERS

Company	1956		1958		1959	
	1,000 pounds	Percent of total	1,000 pounds	Percent of total	1,000 pounds	Percent of total
Union Carbide	77,057	59.42	133,237	58.18	153,109	48.95
Du Pont	26,005	20.05	18,446	8.05	20,000	6.39
U.S.I.	14,675	11.32	32,200	14.06	50,835	16.25
Spencer	2,111	1.63	9,200	4.02	13,750	4.40
Eastman	3,845	2.96	9,135	3.99	24,087	7.70
Dow	202	.16	7,560	3.30	22,831	7.30
Monsanto	4,128	3.18	11,971	5.23	18,300	5.85
Koppers	1,655	1.28	7,269	3.17	9,883	3.16
Total	129,678	100.00	229,018	100.00	312,795	100.00

The Visking Corporation in 1956 was the largest producer of polyethylene film with assets of $38,309,000 and annual sales of $56,022,000. Its business was evenly divided between its two principal products, synthetic sausage and meat casings and polyethylene film. Visking's sales of polyethylene film during 1956 totaled approximately $27,000,000 of which approximately 46.2% was sold to converters, end users and jobbers in the flexible packaging field.

Both Union Carbide and The Visking Corporation were at the time of acquisition selling their products in commerce throughout the entire United States and the parties have agreed that the relevant geographic market, i.e., the "section of the country" involved is the entire country.

As we have indicated, one of the principal issues here is whether the acquisition may have the proscribed adverse effects at the polyethylene resin level of competition. The hearing examiner decided that polyethylene resin manufactured and sold for film extrusion purposes constitutes in and of itself a "line of commerce" separate and distinct from resins sold for other purposes. But he further concluded that "regardless of whether the relevant line of commerce be considered to be polyethylene film-grade resin only, or polyethylene resin for any and all uses, the effect of the acquisition of Visking by Union Carbide may be substantially to lessen competition or tend to create a monopoly in the acquiring corporation."

Respondent's appeal urges that the appropriate market is the sale of polyethylene resins for all purposes and in any event, no matter where the boundaries of the relevant market are set, that the requisite proscribed effects therein have not been shown.

The hearing examiner's finding that resins sold for film extrusion purposes constitute in themselves a line of commerce is based almost entirely on physical differences between the so-called film grade resins and resins sold for other purposes. Our review of the evidence convinces us of the correctness of this finding. Resin manufactured to

be processed into polyethylene film most generally contains additives which especially adapt it for film use. In addition, a sizeable amount of basic resin, that is resin which does not contain additives, is sold for film processing but these so-called basic resins are specially designed or selected for film use. There is much additional evidence in the record to support the finding that film-grade resins are in themselves a line of commerce including the fact that the industry itself recognizes the separate identity of these resins; they are apparently more difficult to produce than other resins; and producers occasionally change prices on film-grade resins without changing the prices of others.

But as we view it there is no real necessity to determine whether the line of commerce consists of only film-grade resins or of all resins since the proscribed effects upon both lines have been demonstrated in this record.

By acquiring Visking, Union Carbide secured the power to foreclose competitors from a substantial share of both the film-grade and general use resin markets. The following table indicates that the resin requirements of Visking are substantial whether considered alone or in comparison with either universe.

	Visking's purchases (1,000 pounds)	Visking's share of film-grade resin shipments	Visking's share of all U.S. resin shipments
1956	51,526	39.73	13.11
1958	75,219	32.84	13.39
1959	83,861	26.81	11.52

Our economy has not reached a state of development or sophistication where $20,000,000, the approximate value of Visking's purchases in 1956, can be described as anything other than "substantial". Some idea of the importance of the Visking requirements can be gathered from the fact that in 1956 and 1958 Visking alone purchased more resin than the combined total shipped to independent film extruder customers by all seven of Union Carbide's competitors. In 1959, despite an increase over 1956 of 6,000,000 pounds in total industry shipments to film extruders, Visking's purchases were approximately equal to the total shipments of resins for film use of six of Union Carbide's competitors (excluding Eastman-Kodak). In 1956, Visking's requirements were greater than the domestic shipments of all types of resin by each of six of the eight resin producers. By 1959 it still bought more resin than five of the eight resin producers shipped domestically for all uses.

Respondent argues that substantiality alone will not satisfy the competitive impact clause of Section 7 and that the tests used in the ex-

clusive dealing cases[3] are not applicable to proceedings under this section. We do not reach this issue since this record contains much additional evidence to support a finding that the effect of this acquisition may be to substantially lessen competition or tend to create a monopoly in the market for polyethylene resin.

It seems clear that the polyethylene resin manufacturing industry is not marked by ease of entry. It takes a minimum expenditure of $9,000,000 to build a plant of acceptable efficiency. Two years are required to build such a plant and at least a year is required to recruit and train a production and sales staff. Substantial expenditures for continuing research are apparently necessary if a company is to be an effective competitor in this field. In 1959, Union Carbide spent approximately $3,500,000 in research and development of polyethylene resins.

Mergers of this type, that is, the acquisition of customers, beget additional mergers. A resin manufacturer faced with a market over which its competitors are acquiring ever-increasing control is forced to protect its position by acquiring for itself control of a segment of the market and the quickest route to such control is through acquisition. At least four of Union Carbide's seven competitors have acquired film manufacturing companies. With one exception, these acquisitions have taken place after the respondent's acquisition of Visking. Of course, the control of a sizeable segment of the market by films already established in the industry serves further to discourage the entry of new manufacturers. In 1958 and 1959 approximately 40% of all shipments of film-grade resins were made by resin manufacturers to their owned film producing factories. Thus the market for film-grade resins, constituting 43% of the total resin market, is substantially under the control of resin producers. The re-emergence of Visking as an independent purchaser should help to reverse this trend toward an ever-increasingly controlled market.

It is a basic precept of American business that the hottest competitive fight is waged for the business of the large buyer. In fact, the Robinson-Patman Act was enacted for the primary purpose of regulating and preventing discriminatory excesses in the battle for the patronage of the big volume buyer. Visking was and is by far the largest buyer of polyethylene resin. Its removal as a source and goal of competitive activity has effected a lessening of competition at the resin manufacturing level commensurate with its total volume of resin purchases and as we have seen, that volume is both quantitatively and comparatively substantial.

---

[3] E.g., *Standard Oil Co. of California* v. *United States*, 337 U.S. 293, 314 (1949).

The argument between the parties over the limits of the relevant product market at the film level is similar to their disagreement over the resin market. Respondent argues for a market encompassing all flexible packaging materials including such varied products as aluminum foil, cellophane, Saran, cellulose acetate, kraft paper and mesh. Relying upon the so-called *Cellophane* case [4] respondent claims that the record shows that polyethylene film is subjected to continuous competition from other packaging materials, that so-called "cross-elasticity of demand" is present and that the physical characteristics of polyethylene film and the other flexible packaging materials are insufficiently different to be commercially significant.

The hearing examiner found for counsel supporting the complaint on this point holding that polyethylene film sold for flexible packaging purposes has sufficient peculiar characteristics and uses to constitute it a separate and distinct product market. The phrase "sufficient peculiar characteristics and uses" is taken verbatim from the opinion of the Supreme Court in the *duPont-General Motors* [5] case indicating reliance upon the interpretive rule and reasoning there employed.

Our review of the record has persuaded us that the hearing examiner's decision is correct and in harmony with both the *Cellophane* and *duPont-General Motors* decisions. In making this determination we have weighed carefully all of the usual criteria including one which we deem important but which has received little attention. This factor is the preference of users or buyers for a particular product or material despite the existence of adequate substitutes. Reasoning of this type was employed by the court in the recent *Crown Zellerbach* [6] case. In upholding the Commission's determination that the line of commerce there involved was limited to "census coarse paper" the court first referred to the *duPont-General Motors* case stating: "Unquestionably the fact that General Motors, the customer, chose to buy these particular finishes and fabrics, sufficiently distinguished them so that they constituted by themselves the relevant market." It then concluded: "Here, as the record and the statistics show, the customers of St. Helens, and the customers of Crown, in ordering and purchasing papers designated as wrapping paper, shipping sack paper, bag paper, envelope paper, etc., by that very fact, demonstrate and create a market for those specific products so that they collectively may properly identify the relevant market here involved."

Polyethylene film is today the most important flexible packaging material and its sales and usages are growing at a phenomenal pace.

---

[4] *United States* v. *E. I. duPont deNemours & Co.*, 351 U.S. 377 (1956).
[5] *United States* v. *E. I. duPont deNemours & Co.*, 353 U.S. 586 (1957).
[6] *Crown Zellerbach Corporation* v. *Federal Trade Commission*, 296 F.2d 800 (9th Cir. 1961.

Of the 96 converter members of the National Flexible Packaging Association, 81 handle polyethylene film. By comparison, 63 members handle cellophane and 42 handle kraft paper, the two next most popular materials. Domestic shipments of resin to film extruders increased from 120,002,893 pounds in 1955 to 312,795,000 pounds in 1959.

The tremendous increase in the use of polyethylene as a flexible packaging material is due to its unique combination of physical characteristics. No other single packaging material does so many jobs so well. Other materials may surpass it in individual particulars but none can approach it in versatility.

The record clearly shows that an ever-growing number of sellers deem it important to present their products in transparent packages. In 1946, polyethylene film had a high haze factor and was more accurately described as translucent than transparent. Technical progress removed the haze and at the time of suit polyethylene film was almost the equal of cellophane in clarity. Cellophane remains superior in grease resistance and in adaptability to use in high speed wrapping machines. In other respects polyethylene film is quite superior to cellophane. It retains its strength in extremely low temperatures whereas cellophane cracks and tears very easily. It does not deteriorate as rapidly with age as cellophane and therefore its effective shelf life is substantially longer. Polyethylene film has the limpness and pliability of cloth while cellophane is substantially stiffer and capable of being crumpled like paper. Polyethylene film is a substantially stronger material than cellophane, making it useful for packaging heavy items where cellophane is wholly unsuited.

In 1949, the average wholesale price of polyethylene film was more than double that of cellophane and was substantially higher than the price of all other important flexible materials except Saran. Today polyethylene film is lower in cost than cellophane and most of the other flexible packaging materials and this fact is both a cause and a product of its success.

The union of polyethylene film's unique aggregation of physical qualities with its lower price has enabled it to usurp large segments of the packaging market. This process has apparently only begun and is proceeding at an amazing pace. This phenomenon has occurred most strikingly in the soft goods packaging field. Cellophane was once the principal transparent material in use in this area but it has now been substantially replaced by polyethylene film. The principal reasons for the shift appear to be polyethylene's longer shelf life, limpness and low cost. Competition among soft goods sellers is another factor which plays a part. Testimony indicates that a competitor's adoption of polyethylene film as a packaging material forces other sellers to likewise adopt the film. Many well-known

brands of soft goods once packaged in cellophane today appear only in polyethylene.[7] The vice-president of Cellu-Craft Products Corp., a leading converter of flexible packaging products with sales of over eight million dollars annually, testified that within five years from the time that polyethylene film packaging was introduced for soft goods practically all of his soft goods accounts had switched to it from cellophane. At the time he testified, 95% of his soft goods business was accounted for by polyethylene.

Polyethylene has and is making substantial inroads against established products as a material for packaging candy, potatoes, dry cleaned garments and laundered shirts.

Of course, there is and will continue to be competition between polyethylene film and other flexible packaging materials. This type of inter-product competition will always exist but it does not preclude a finding that a distinct and separate market exists for polyethylene film as a packaging material anymore than the existence of competition between cotton, silk and linen or between brick, wood and stone forces the conclusion that no separate market exists for these products.

A packager who desires a package with the physical characteristics of polyethylene film must buy a polyethylene film package just as the housewife who desires a tablecloth with all the characteristics of linen must purchase one of linen. The existence of adequate substitutes does not erase the fact that consumers who desire a particular product constitute a separate market for that product. And where as here that market is substantial it constitutes a line of commerce as those words are used in Section 7 of the Clayton Act.

To determine whether this acquisition may have the proscribed effects at the film level it is necessary to compare the power and capabilities of Visking before the merger with Union Carbide's power and capabilities after the acquisition. In other words, how has the acquisition changed the competitive picture at the film level? Visking now has the backing of approximately 1½ billion dollars in assets as compared to its pre-merger assets of 38 million dollars. But apparently Visking's assets were adequate to enable it to effectively compete in its field. In 1956, approximately 60 companies competed as extruders of polyethylene film. Visking accounted for 40.23% of total film shipments during that year. Its next largest competitor made shipments equal to only 6.5% of the total. Thus it must be concluded that Visking as an independent company had great economic power vis a vis its smaller competitors and that the backing of the additional

[7] For example, in the men's shirt field, Arrow, Manhattan, Hathaway, Van Heusen and Fruit of the Loom are now packaged exclusively in polyethylene film.

assets of Union Carbide, while materially adding to its competitive strength, would not of necessity effect a lessening of competition.

But we have more here than the mere amalgamation of the assets of two large and powerful corporations. We are here confronted with the merger of the dominant supplier of a raw material with the dominant processor and reseller of the same raw material. Such a combination is formidable indeed since Visking is now insulated from the necessity of procuring its raw material in competition with other film extruders. The Union Carbide-Visking combine has the power to lower film prices below the break-even level of its small, non-integrated film extruder competitors and yet realize a profit on over-all operations. Respondent can, without interference from the Robinson-Patman Act, supply resin to its Visking Division at prices substantially lower than it charges competing film extruders. As a part of Union Carbide, Visking is protected from shortages which may arise in the supply of film-grade resin and will have primary access to any technological improvements in the product.

Without doubt, the Union Carbide-Visking combination is a more formidable antagonist to the small film extruders than Visking alone. The combination is effectively insulated from many of the factors which restrain its extruder competitors and has the power to drive them to the wall. Thus the effect of respondent's acquisition of Visking may be to substantially lessen competition or tend to create a monopoly in the manufacture and sale of polyethylene film.

It must be remembered that polyethylene is a relatively new product for which new uses and applications are discovered almost daily. While apparently technically mature, research by respondent and others goes forward to further improve and modify the product. Without doubt each technical improvement will further broaden the markets for polyethylene items.

While monopolies are to be abhorred wherever they appear, it is of particular importance that they be arrested in an infant industry which appears destined for far greater expansion and growth. Strong and vigorous competition is the catalyst of rapid economic progress. Any lessening of competition is therefore doubly harmful in a new industry since its inevitable effect is to slow down the growth rate of the industry. In these times, in the face of threats from abroad to economically "bury" us, an accelerated rate of economic growth may well be a prerequisite to national survival. Under these circumstances we must be especially vigilant to protect the economy from any obstacles to its rapid expansion.

We are convinced beyond any doubt that the merger of the polyethylene film business of The Visking Corporation into Union Carbide Corporation has lessened and may in the future even further lessen

competition and unless deterred by divestiture, Union Carbide may eventually achieve a monopoly in both polyethylene resin and polyethylene film. Therefore, this acquisition is against the public policy of the United States as expressed in Section 7 of the amended Clayton Act and an order of divestment must issue.

The order issued by the hearing examiner quite correctly requires respondent to divest itself of the polyethylene business acquired from Visking. However, it goes further, requiring divestiture of a polyethylene manufacturing plant built by Union Carbide sometime after the date of the acquisition. We are of the opinion that under the circumstances present in this record the order should require only the divestiture of that aggregation of assets, rights, good will and properties which were acquired in the Visking acquisition together with all improvements, including machinery and other equipment subsequently installed in the acquired plants and offices. The ultimate aim of an order of divestiture is to restore and assure a market in which competition will be active and vigorous. This goal will be more fully realized if Visking is restored as a competitor with only the facilities it operated at the time of its acquisition. As so restored it will still be the largest producer of polyethylene film and will be well able to take care of itself.

While the retention by Union Carbide of the plant in question is not without its perils, we feel that the presence of Union Carbide as another competitor in the film market outweighs any foreseeable ill effects. Any inconsistencies between our ruling on the Cartersville plant and our statements above concerning the anticompetitive effects engendered by the acquisition are more apparent than real. Union Carbide in full possession of Visking, the dominant film manufacturer, is in an entirely different category from Union Carbide as the operator of one film manufacturing plant and forced to compete in a film market containing a restored Visking.

We come now to the appeal of counsel supporting the complaint from the dismissal of the complaint charge with respect to that approximately one-half of Visking's business concerned with the manufacture and sale of synthetic sausage casings. As noted above, this count of the complaint was actually dismissed at the conclusion of the case-in-chief and the respondent was therefore not required and did not offer any defensive evidence to rebut this charge. Counsel supporting the complaint now asks the Commission to order divestment of the sausage casings business acquired, but in our view such an order would be improper since respondent has not had its day in court with respect to this charge. Of course, the appeal itself is quite proper and will be considered as a request for a reversal of the hearing examiner's dismissal and a remand to the hearing examiner

to afford the respondent an opportunity to present such defensive evidence as it desires.

The principal sausage casing product produced and sold by Visking is composed of regenerated cellulose. Visking patented the process and as a result held legal monopoly control from about 1926 until expiration of the patents in 1953. The Visking casing was designed as a replacement for animal tissue which at the time of its invention was the predominant product in this field. Because of the unique combination of physical characteristics of the regenerated cellulose casings produced by Visking they have enjoyed a steady and striking success. By 1956, Visking's sales of this product exceeded twelve million pounds, with a dollar value of $25,591,000. In 1956, Visking's sales of cellulose casings accounted for approximately 60% of the total sales of this product. The manufacture of sausage casings is carried on in separate plants located in Chicago, Illinois, and Loudon, Tennessee, having no relation whatever to Visking's polyethylene film business.

An adequate sausage casing must have many qualities including strength, smoke permeability, nontoxicity, elasticity, adherence to the meat, low weight and printability. The hearing examiner correctly found that regenerated cellulose synthetic sausage casings are sufficiently unique to constitute in and of themselves a line of commerce.

At the time of the acquisition, Visking had only two competitors in the sale of regenerated cellulose casings, American Viscose Corporation and TeePak Inc. Until recently these two competitors operated under licenses granted by Visking. The expiration of the Visking patents has now opened the field to new entrants. The record contains no evidence as to the degree of economic and technological requirements of entry into this market.

We find no error in the dismissal of this charge of the complaint. Union Carbide did not compete with Visking in the sale of regenerated cellulose sausage casings nor did it supply the materials from which they are made. This aspect of the acquisition is purely conglomerate and the worst thing that can be said of it is that the Visking cellulose sausage casings now have the backing of Union Carbide's one and one-half billion dollars instead of Visking's thirty-eight million. This showing alone will not support a finding that a lessening of competition is the probable result of Union Carbide's emergence as a sausage casing seller. Such an unfavorable prognosis must be based upon more solid ground.

This is not to say that a finding of proscribed effects in all lines of commerce in which the acquired corporation is engaged is a necessary

prerequisite to an order of total divestiture. The Act is violated if the forbidden effect or tendency occurs in any line of commerce. And once a violation has been found, the entire acquisition is subject to a divestment order. But total divestiture is not an automatic remedy which must be applied in all cases. The choice of remedies is the Commission's to be exercised with the goal of restoring and assuring the preservation of healthy competition in the relevant markets. Achieving this goal may on occasion require ordering divestment of facilities unrelated to the line of commerce affected by the acquisition as, for example, where the restoration of the acquired company as a healthy competitior requires that it be kept intact. That situation is not presented by this record. Visking will be an effective and strong competitor in the polyethylene film market although shorn of its sausage casing business.

We would, of course, prefer to see more than three producers competing in the sale of cellulose sausage casings, but this aspect of market control is beyond our power. Here one competitior has been replaced by another. The competitive picture is essentially as it was before the acquisition except for the aforementioned increase in the economic backing of the Visking casing business. If this competitive picture should at any time in the future alter in a manner which would indicate that our decision here is in error, a new complaint based upon the new facts inherent in the changed situation can be speedily issued. At this time, on this record, there is no showing that the public interest would be served by an order requiring respondent to divest itself of the Visking sausage casing business and the hearing examiner's dismissal of that portion of the complaint is hereby affirmed.

Respondent's appeal is granted to the extent heretofore indicated and in all other respects denied. The appeal of counsel supporting the complaint is denied. It is directed that an appropriate order issue with this opinion modifying the initial decision in conformity with the views herein expressed and adopting it, as modified, as the decision of the Commission.

Commissioner Anderson concurs in the result, and Commissioner Kern dissents.

Commissioner ELMAN, concurring:

I concur in the Commission's decision and order, and am in general agreement with the views expressed in Chairman Dixon's forceful opinion. I believe, however, that while the order of divestiture here is clearly warranted by the facts of record, it should be based on more narrow and limited grounds than those canvassed in the majority opinion.

First. Some preliminary general observations may be in order. When one corporation acquires the stock or assets of another, a full inquiry into the economic effects and implications of the transaction would necessarily cover a very broad range. An economist making a comprehensive study or analysis of the merger would seek illumination on many matters, including industry structure and growth patterns, market power, prior marketing practices of the companies involved, market incentives to competition, the extent of product differentiation, industry economies of scale and the general problem of barriers to entry, etc. The scope of the Commission's inquiry in a Section 7 proceeding, however, should be far more limited. The Commission's responsibility is to pass on the legality of the challenged merger under defined statutory standards. It does not sit to examine and weigh the *pros* and *cons* of the merger in all its aspects, or to decide, in the light of all the relevant data and opinions that might be adduced regarding its nature and effects, whether the merger is good or bad, wholesome or unwholesome, as a matter of national economic policy.

The national policy as to corporate mergers was established by Congress when it enacted Section 7 of the Clayton Act.[1] If a merger has characteristics proscribed by Section 7, it is unlawful. The Commission's function in a Section 7 proceeding is to determine whether those characteristics are present. Once it finds that they are, the acquisition must be declared illegal and an appropriate order entered. So far as the Commission's inquiry is concerned, that ends the matter.

I think it highly important, therefore, and even imperative in the interest of effective enforcement of the statute, to emphasize the need for simplifying and confining the range of issues in Section 7 proceedings. I have the impression that many cases have been dragged out almost interminably by the effort on both sides, sincere and conscientious though it be, to present every piece of oral and written evidence that conceivably might be relevant in appraising the nature and effects of the transaction in dispute. Too often the result has

---

[1] See *Crown Zellerbach Corp.* v. *Federal Trade Commission*, D. No. 15.904, C.A. 9, June 5, 1961 [296 F. 2d 800] at p. 825 [7 S. & D. 126 at 156]: "Congress was not concerned about increased efficiency; it was concerned about the competitor,—the small business man whose 'little independent units are gobbled up by bigger ones,' and about other competitors whose opportunities to meet the prices of the large concern and hence compete with it might be diminished by a merger which increased the concentration of power in the large organization. . . .

"As the legislation was under consideration by Congress it was duly appreciated that decentralized and deconcentrated markets are often uneconomic and provide higher costs and prices. All this it laid aside in its concern over the 'curse of bigness' and this concentration of power in the nation's markets which Congress thought advantaged the big man and disadvantaged the little one." Quoting in part the dissent of Douglas, J., in *United States* v. *Columbia Steel*, 334 U.S. 495, 534.

been that relief has come, if at all, so late as to create hardship to the parties, or frustration of the statutory policy, or both.[2]

Within the framework of the broad statutory provisions, the Commission has the duty to formulate, as best it can, specific criteria for determining the legality of corporate mergers. To be sure, it is the obligation of a hearing examiner to confine the scope of a Section 7 proceeding as narrowly as the issues permit. But it is our responsibility to instruct the examiner as to the matters which are controlling. It is not enough, in my view, to direct the examiner "that he look at all the relevant facts of competition", and to intimate broadly that "in certain situations the rigid yardstick of market shares might not only be extremely meaningful, but indeed perhaps conclusive under some circumstances on the issue of probability of competitive injury or tendency to monopoly" (*Brillo Manufacturing Co., Inc.*, 56 F.T.C. 1672, D. 6557, issued March 25, 1960). Commissioner Kern, in his dissenting opinion here, quite properly observes that an examiner "should shape the dimensions of a case from pre-trial hearing to conclusion in order to accomplish a fair trial with due process and yet maintain an unrepetitious, concise, sharp record." *Quaere*, however, how helpful it is to an examiner to be told that it is his duty "to be bound by established principles of relevancy and materiality" and that once "relevant material is in the record it should be assessed and evaluated, not ignored." An examiner conscientiously attempting to discharge his obligation under the Commission's Rules of Practice to simplify and expedite the proceedings, but uncertain as to what lines of inquiry he may safely bar the parties from pursuing, is entitled to more specific guidance from the Commission.

From my point of view, therefore, it is not a satisfactory disposition of a Section 7 case for the Commission to rationalize its decision in terms simply of a broad rule of "reason" or "relevancy." Neither to Congress, which has shown great concern over excessive concentrations of economic power resulting from corporate mergers, nor to businessmen, who need to know whether a contemplated merger will stick or will be forcibly undone, perhaps after years of expensive and wasteful litigation, is it enough to be given assurances that the Federal Trade Commission will take whatever action it finds to be

---

[2] As the Court observed in the *Crown Zellerbach* case, *supra* note 1, at p. 826 [7 S. & D. 160]: "[S]ome writers have suggested that the Commission, or the courts, in inquiring into a claimed violation of § 7 should examine a multitude of so-called relevant economic factors. As if the average anti-trust trial were not sufficiently complicated at best, some of these suggestions to enlarge the list of 'relevant factors' upon which findings were required would tend to make a case of this kind so appallingly complicated that any judge might well wonder whether the controversy was really a justiciable one. And it is a bit hard to believe that Congress meant that a business concern contemplating merger must undergo a similar struggle to find out whether its plans may or may not be carried out."

"reasonable" on the particular record. Nor is it much more reassuring to add that the Commission will base its decision upon "all the relevant facts of competition."

Of course, the Commission's decision should be reasonable and be made upon consideration of the relevant facts; but reasonableness and relevancy do not express absolute or self-defining standards of legality. One must go on to ask, "reasonable" and "relevant" in relation to *what*? Even in the law of negligence, liability is not predicated simply on what the tribunal thinks is a "reasonable" or "just" judgment between the particular parties on the particular facts. Nor did Congress in Section 7 of the Clayton Act give the Commission a blank check, to be filled out in each case as it thinks "reasonable." As I shall try to show, the Commission, at least in dealing with so-called vertical mergers of the sort involved here, has no need to leave obscure or uncertain the applicable basic yardstick of legality. The terms of Section 7, the policy of Congress manifested not only by the statute's provisions but by the legislative history, and the authoritative construction of the statute made by the Supreme Court—all combine to confirm the validity of a sufficient—though not necessarily exclusive—and relatively limited test: Does the merger have the likelihood of foreclosing competition in a substantial part of "any line of commerce in any section of the country?" If a merger is clearly unlawful on this single narrow ground, quickly demonstrable by easily ascertainable objective data, it is neither necessary nor desirable to make further inquiry by considering evidence relevant to other possible bases for a finding of illegality. Only in the event that the illegality of the merger is not apparent upon application of this test should an economic inquiry of broader range be undertaken.

Second. Despite the length and breadth of the proceedings in the instant case,[3] the facts which, in my view, establish illegality of the merger are strikingly simple.

Union Carbide is the second largest chemical company in the United States. In 1956, at the time of its acquisition of Visking, it had assets of 1½ billion dollars. It was by far the country's largest producer of polyethylene resins, the basic raw material from which polyethylene

[3] The complaint was issued July 8, 1957. Hearings in support of the case-in-chief commenced on November 12, 1957, and were held before a hearing examiner in New York, Philadelphia, Chicago, and Washington, D.C., in November and December 1957 and in March 1958. Counsel supporting the complaint rested their case-in-chief on March 21, 1958. Defense hearings were held in November 1958 and in January, February, April and June 1959, until they were halted by the death of the hearing examiner. After a second examiner was assigned to the case, further defense hearings were held in August, September, and November 1959, and in January, February, and March 1960. Counsel supporting the complaint presented rebuttal evidence in May and June 1960. After a surrebuttal hearing in Washington, D.C., on June 17, 1960, the record was closed for the reception of evidence. The record contains more than 9,100 pages of transcript and over 1,200 exhibits.

film is made. Prior to November 1954, when Eastman Kodak entered the field, Union Carbide and duPont were the only manufacturers of polyethylene resins in the United States. In 1956, Union Carbide produced 47.9%, duPont 21.1%, and the other six producers, including Eastman Kodak, the remaining 31% of domestic shipments of resins.

In 1956 Visking was the largest producer of polyethylene film, with assets of more than 38 million dollars and annual sales of film approximating 27 million dollars. Of the 113 million pounds of film annually produced in the United States, Visking made over 45 million pounds, or 40.23%. Its nearest competitor accounted for about 6.5%, or about one-sixth of Visking's shipments. Visking was thus also the largest single customer in the market for polyethylene resins used in the manufacture of films. In 1956, it purchased about 51½ million pounds of resins, or 39.7% of all the resins shipped by resin manufacturers to film producers in that year. Since about one-third of all domestic production of resins was used in the manufacture of film, Visking's purchases constituted 13.1% of all the resins produced and sold in the United States for every purpose.

Third. The hearing examiner and the Commission have found that Union Carbide's acquisition of Visking may foreclose other producers of polyethylene resins from free competition in that substantial share of the market for their products represented by Visking's purchases. I not only agree with this finding but believe that no other finding is supportable in view of the undisputed facts of record summarized above.

For the reasons which I shall elaborate below, this finding suffices to establish the illegality of the merger, and I would go no further. It is unnecessary, as both the hearing examiner and the Commission agree, to resolve the dispute between the parties as to the proper delineation of the relevant market in polyethylene resins. Accepting, for purposes of decision, respondent's definition of the market as embracing all resins produced in the United States, and not merely those designed or selected for manufacture into polyethylene film, I concur in the finding that by acquiring Visking, Union Carbide secured the power to remove from the market and allocate to itself exclusively the purchasing power of the largest single customer for resins in the market. The conclusion of illegality flowing from this finding also makes it unnecessary, in my view, to resolve other questions discussed in the Commission's opinion.

Fourth. On the view I take of this case, the Supreme Court's decisions in *United States* v. *duPont & Co.*, 353 U.S. 586 (1957) and 366 U.S. 316 (1961), are clearly controlling. The facts of the instant case bring it well within the scope of the principles set forth in *duPont*. To establish a violation of Section 7, the Court held, two

requirements of proof must be satisfied: (1) "The market affected must be substantial." (2) There must be "a likelihood that competition may be 'foreclosed in a substantial share of * * * [that market].'" 353 U.S. at 595, quoting *Standard Oil Co.* v. *United States*, 337 U.S. 293, at 314.[4]

Thus, whatever may be the tests under other provisions of our antitrust laws, it is clear that likelihood of foreclosure of competition in a substantial share of the market is a proper and sufficient test under Section 7. Any doubt there may have been on this score was surely dispelled when, in its recent decision on relief in the *duPont* case, the Court summarized its holding on the merits as follows:

> We held that duPont's acquisition of the 23 per cent of General Motors stock had led to *the insulation from free competition of most of the General Motors market* in automobile finishes and fabrics, with the *resultant likelihood*, at the time of suit, of the creation of a monopoly of a line of commerce, and, *accordingly*, that duPont had violated Section 7 of the Clayton Act. (Emphasis added.) 366 U.S. 316, at 318–319.

From a finding of "insulation from free competition" of the substantial share of the market that General Motors represented, it followed that a violation of Section 7 had occurred.

Fifth. Thus, the acquisition of Visking by United Carbide constituted a violation of Section 7 if, without more, it created a likelihood of foreclosure to Union Carbide's competitors of a substantial share of the market for their polyethylene resins.[5] The facts of the case make it difficult—indeed almost impossible—to conclude that it did not. Visking is, by comparative standards, a massive consumer of polyethylene resins, and Union Carbide has ample productive capacity to satisfy its requirements *in toto* at will. Visking is no longer an independent entity, wholly free to buy from any willing seller; it is a wholly owned and controlled component of the leading supplier of the raw product from which its polyethylene film is made. A serious anticompetitive tendency is inherent in such a relationship. Where once Union Carbide faced competition in price, product quality, and service for the substantial market represented by Visking's purchases of resins, it may now secure this entire business simply by its own executive direction. Similarly, where once Union Carbide's competitors might reasonably have expected that any appreciable measure of price,

---

[4] In the *duPont* case the Court dealt with Section 7 as it was prior to amendment in 1950. 38 Stat. 731, 15 U.S.C. (1948 ed.) 18. However, this does not detract from the applicability of that decision to this case, since the amendments left unimpaired the statute's prohibitions against acquisitions tending substantially to the lessening of competition or to the creation of a monopoly.

[5] The preliminary requirement of the *duPont* case—that the market itself be found to be substantial, 353 U.S. at 595—is indisputably satisfied in this case, as the figures in Paragraph Second show.

product, or service superiority would increase their sales to Visking, now only the most dramatic departure—for example, one rendering Union Carbide's product obsolete—could justify a hope of selling more resins to Visking than strictly suited the convenience of its dominant supplier-owner. In periods of slack demand, at minimum, this would presumably be no resins at all. In the words of the second *duPont* opinion, quoted *supra*, Union Carbide's acquisition of Visking may reasonably be expected to lead to "insulation from free competition of most of the [Visking] market." (366 U.S., at 318–319).

The stark realities of this situation must openly invite—if, indeed, they do not compel—Union Carbide's rivals to seek the security of vertical integration for themselves.[6] Beyond the encouragement of further mergers, other adverse competitive effects may be reasonably inferred from the change in market structure accomplished by the acquisition of Visking. The foreclosure of a substantial proportion of a market may raise barriers to the entry of new competitors and may jeopardize the position of existing ones. The acquisition of an assured outlet for a large share of its product may give the acquiring company, in this instance the industry leader, an important advantage over its competitors.

It is unnecessary, however, to explore all ramifications of the change in market structure effected by the acquisition; nor is it necessary to predict its anticompetitive consequences with the certainty required in Sherman Act cases. As the *Standard Oil* and *duPont* cases make clear, the test of Clayton Act violation is only whether there is a "reasonable probability" or "likelihood" that the acquisition may result in foreclosing competition in a substantial share of the relevant market or "line of commerce." And, as the Supreme Court pointed out in the first *duPont* opinion (353 U.S., at 607), "The statutory policy of fostering free competition is obviously furthered when no supplier has an advantage over his competitors from an acquisition of his customer's stock [or assets] likely to have the effects condemned by the statute."

It must not be forgotten that the Clayton Act was expressly aimed at curbing anticompetitive practices "*in their incipiency and before consummation.*" S. Rep. No. 698, 63d Cong., 2d Sess., p. 1 (1914), (emphasis added by the Supreme Court in the first *duPont* opinion, 353 U.S., at 597). We need not wait for monopoly to burgeon; indeed, we are obligated under the statute to prevent it from doing so. The operative words of Section 7 are "where * * * the effect * * * may,"

[6] Though not essential to the showing of illegality here, it may be observed that the extent to which vertical integration has progressed in the industry—at least four of Union Carbide's seven competitors in the sale of resins having purchased film producers—already represents the type of collective effect upon the remaining competition which was noted by the Supreme Court in *Standard Oil Co. v. United States*, 337 U.S. 293, 309 (1949).

not "where * * * the effect * * * is." Sherman Act certainty is not required; a "reasonable probability" will suffice. S. Rep. No. 1775, 81st Cong., 2d Sess., p. 6 (1950).[7] That this test is satisfied in the present case, I cannot doubt.

Perhaps it can be demonstrated that the Union Carbide-Visking merger lacks the magnitude to confer upon the resultant combination present monopoly power over price. But the legislators who sponsored the 1950 amendments to the statute took pains to explain that this was irrelevant:

> Acquisitions of stock or assets have a cumulative effect, and control of the market sufficient to constitute a violation of the Sherman Act may be achieved not in a single acquisition but as the result of a series of acquisitions. The bill is intended to permit intervention in such a cumulative process when the effect of an acquisition may be a significant reduction in the vigor of competition, even though this effect may not be so far-reaching as to amount to a combination in restraint of trade, create a monopoly, or constitute an attempt to monopolize. Such an effect may arise in various ways: such as . . . establishments of relationships between buyers and sellers which deprive their rivals of a fair opportunity to compete.
>
> Under H.R. 2734 a merger or acquisition will be unlawful if it may have the effect of either (a) substantially lessening competition or (b) tending to create a monopoly. These two tests of illegality are intended to be similar to those which the courts have applied in interpreting the same language as used in other sections of the Clayton Act. Thus, it would be unnecessary for the Government . . . to show that as a result of a merger the acquiring firm had already obtained such a degree of control that it possessed the power to destroy or exclude competitors or fix prices. (H. Rep. No. 1191, 81st Cong., 1st Sess., p. 8 (1949).)

Our concern must therefore be not so much with the present effects of an acquisition as with its potential consequences for the future. Surely the merger involved in this case is unlawful when measured in terms of such potentialities. To require significantly greater market foreclosure before acting would be to approach a Sherman Act test of concentration, thereby rendering Section 7 nugatory in practical application.

Dissenting Opinion of Commissioner KERN.

I find it necessary to differ with some of the views expressed by my colleagues including their proposed disposition of this proceeding.

It seems to me that the Chairman would go to one extreme of injecting into our deliberations broad economic considerations *de hors*

---

[7] In *United States* v. *Bethlehem Steel Corp.*, 168 F. Supp. 576, 603 (S.D.N.Y.), Judge Weinfeld stated: "The Government is not required to establish with certitude that competition in fact will be substantially lessened. Its burden is met if it establishes a reasonable probability that the proposed merger will substantially lessen competition or tend to create a monopoly. 'A requirement of certainty and actuality of injury to competition is incompatible with an effort to supplement the Sherman Act by reaching incipient restraints.'" Quoting in part, S. Rep. No. 1775, *supra*, at p. 6.

See also *Crown Zellerbach*, supra note 1.

the record,[1] whereas Commissioner Elman would go to the other extreme of confining us to an exceedingly narrow view as to the scope of the inquiry in reaching a determination as to whether the statutory tests of illegality have been demonstrated.[2]

There is, I believe, a middle path and that is the path the Commission has uniformly followed.[3] Moreover, it is a technique which has been upheld upon review.[4]

In the matter of *Brillo Manufacturing Company, Inc.*,[5] I made it clear in an opinion remanding the proceeding to the hearing examiner that relevant economic factors as well as statistical data in merger matters were important. In that opinion (p. 2) I said:

It seems to us that the hearing examiner's first ruling upon the motion which, upon appeal, we reversed and remanded, was unduly preoccupied with pursuing the so-called quantitative substantiality doctrine—in this case to a point unjustified by existing judicial precedents interpreting the requirements of Section 7 of the Clayton Act—and thereby gave overwhelming consideration to market shares to the complete exclusion of all other relevant economic factors. However, the hearing examiner in the initial decision now before us on appeal, with an ambivalence that we deem unjustified by our remand direction, seems repelled by that which he once embraced. He now ignores the great and perhaps conclusive weight to be given to these very same considerations when viewed in connection with an already existing heavy industry concentration and other relevant record facts. When we refused to adhere to the rigid yardstick utilized by the hearing examiner in his earlier ruling, and directed that he look at all the relevant facts of competition, we did not want to be taken to conclude that in certain situations the rigid yardstick of market shares might not only be extremely meaningful, but indeed perhaps conclusive under some

[1] "While monopolies are to be abhorred wherever they appear, it is of particular importance that they be arrested in an infant industry which appears destined for far greater expansion and growth. Strong and vigorous competition is the catalyst of rapid economic progress. Any lessening of competition is therefore doubly harmful in a new industry since its inevitable effect is to slow down the growth rate of the industry. In these times, in the face of threats from abroad to economically 'bury' us, an accelerated rate of economic growth may well be a prerequisite to national survival. Under these circumstances we must be especially vigilant to protect the economy from any obstacles to its rapid expansion." [See p. 656 of Chairman Dixon's Opinion herein.]

[2] "An economist making a comprehensive study or analysis of the merger would seek illumination on many matters, including industry structure and growth patterns, market power, prior marketing practices of the companies involved, market incentives to competition, the extent of product differentiation, industry economies of scale and the general problem of barriers to entry, etc. The scope of the Commission's inquiry in a Section 7 proceeding, however, should be far more limited. The Commission's responsibility is to pass on the legality of the challenged merger under defined statutory criteria. It does not sit to examine and weigh the *pros* and *cons* of the merger in all its aspects, or to decide, in the light of all the relevant data and opinions that might be adduced regarding its nature and effects, whether the merger is good or bad, wholesome or unwholesome, as a matter of national economic policy." [See p. 660 of Commissioner Elman's concurring opinion herein.]

[3] In the Matter of *Crown Zellerbach Corp.*, 54 FTC 769, 798 (1957), F.T.C. Docket 6180; In the Matter of *Scott Paper Company*, 57 FTC 1415, F.T.C. Docket 6559, issued Dec. 16, 1960; In the Matter of *Pillsbury Mills, Inc.*, 57 FTC 1274, F.T.C. Docket 6000, issued Dec. 16, 1960.

[4] *Crown Zellerbach* v. *F.T.C.*, Trade Reg. Rep. (1961 Trade Cas.) Par. 70,038 at 78, 142 (9th Cir., June 5, 1961). [296 F.2d 800, 7 S. & D. 126]

[5] 56 FTC 1672, F.T.C. Docket 6557, issued March 25, 1960.

circumstances on the issue of probability of competitive injury or tendency to monopoly. Obviously, the more concentrated an industry, the more meaningful it becomes; indeed, the more meaningful any additional single evidentiary element bearing on this issue becomes.

Commissioner Elman's opinion would cut back from these views.

While I have never been an advocate of extending the Rule of Reason theory beyond decided limits, it seems to me that we have to consider what I choose to call a Rule of Relevancy. Our own experts have indicated rather broad but I think sound criteria with respect to what is relevant in assessing anti-competitive effects and tendency to monopoly in a Section 7 Clayton Act case.[6]

Moreover, once such relevant material is in the record it should be assessed and evaluated, not ignored.

My disagreement with the views of Commissioner Elman rests in his desire to restrict relevant material either by refusing to admit it on the one hand (although he is not clear as to this), or by refusing to consider it on the other.[7] I do not believe it possible to dictate with too great precision the limits of relevancy and I note that Commissioner Elman's efforts to do so are quite general, but even these general comments somewhat disturb me. For example, he states: "An economist making a comprehensive study or analysis of the merger would seek illumination on many matters, including industry structure and growth patterns, market power, prior marketing practices of the companies involved, market incentives to competition, the extent of product differentiation, industry economies of scale and the general problem of barriers to entry, etc. The scope of the Commission's inquiry in a Section 7 proceeding, however, should be far more

---

[6] Barnes, *Competition and Monopolistic Tendencies in Merger Cases—An Economic Problem in a Legal Setting*, 40 Marq. L. Rev. 141 (1950); Bock, *Mergers and Market Size—Product Dimensions*, 16 Business Record 192 (April 1959); Bock, *Mergers and Market Size—Geographic Dimensions*, 16 Business Record 285 (June 1959); Bock, *Mergers and Market Size—Other Factors*, 16 Business Record 347 (July 1959).

[7] While sympathizing with his desire to limit the size of legal records, sometimes rather unduly proliferated, nevertheless, this is primarily the obligation of the hearing examiner. The hearing examiner must, of course, be mindful of Commissioner Elman's laudable objective of building a concise but complete record. He must likewise be guided in his management of the progress of the case, among other things by the warning of the Ninth Circuit Court of Appeals in *Crown Zellerbach Corp.* v. *F.T.C.* (supra, note 4):

"On the other hand some writers have suggested that the Commission, or the courts, in inquiring into a claimed violation of Section 7 should examine a multitude of so-called relevant economic factors. (Footnote omitted.) As if the average anti-trust trial were not sufficiently complicated at best, some of the suggestions to enlarge the list of 'relevant factors' upon which findings were required would tend to make a case of this kind so appallingly complicated that any judge might well wonder whether the controversy was really a justiciable one (Footnote omitted). And it is a bit hard to believe that Congress meant that a business concern contemplating merger must undergo a similar struggle to find out whether its plans may or may not be carried out."

Rigid rules of relevancy are not practical. It is the hearing examiner's function and duty to apply the standards, laid down by the courts and the Commission, flexible though they be, to the circumstances of each case as it comes before him. He should shape the dimensions of a case from pre-trial hearing to conclusion in order to accomplish a fair trial with due process and yet maintain an unrepetitious, concise, sharp record.

limited." Yet, in his discussion of what he characterizes as the "strikingly simple" facts establishing illegality of this merger, those facts certainly include a great deal of data coming within the purview of "industry structure", and "market power." Furthermore, if we are dealing, as I think we should, with statistical data over a number of years when they are in the record, certainly growth patterns are important. Furthermore "prior marketing practices" of the companies involved may furnish important bases upon which to predicate a decision of probable effect upon competition of the challenged merger. Certainly a "thorough probing of the problem of barriers to entry" may constitute, and indeed has constituted, not only in prior Commission cases but in this proceeding, an important consideration. The Chairman in considering the effect of the acquisition in the line of commerce consisting of high pressure polyethylene resin sold for film extrusion purposes quite properly made a special point of commenting upon the lack of ease of entry.[8] And counsel for respondent in demonstrating lack of effect on competition at the film level of competition not only placed into the record, but stressed in brief and argument evidence indicating ease of entry into the film extruding field.

Sole reliance upon the "strikingly simple" facts, of course, would make it unnecessary to resolve other questions discussed in the Commission's opinion; yet this would shut the door on a consideration of important post-acquisition market facts in the record subsequent to 1956. Where available, I would consider post-acquisition facts not only relevant, but most persuasive. Certainly they were to the Supreme Court in the *duPont* case.[9] Indeed we have considered them in most of our Commission merger matters.[10]

Rigid yardsticks may become legal hobgoblins.[11] I would adhere to our views expressed in prior cases. Furthermore, the Supreme Court's

[8] "It seems clear that the polyethylene resin manufacturing industry is not marked by ease of entry. It takes a minimum expenditure of $9,000,000 to build a plant of acceptable efficiency. Two years are required to build such a plant and at least a year is required to recruit and train a production and sales staff. Substantial expenditures for continuing research are apparently necessary if a company is to be an effective competitor in this field. In 1959, Union Carbide spent approximately $3,500,000 in research and development of polyethylene resins" [See p. 652 of Chairman's opinion herein.]

[9] *United States* v. *duPont & Co.*, 353 U.S. 586, 603 et seq. (1957).

[10] In our recent opinion in the matter of *Procter & Gamble Company*, F.T.C. Docket 6901, issued June 15, 1961, remanding the proceeding to the hearing examiner we said:

"Moreover, this disposition of the matter, providing as it will a more complete and detailed post-acquisition picture, has the advantage of allowing the Commission an informed hindsight upon which it can act rather than placing too strong a reliance upon treacherous conjecture." [58 F.T.C. 1207]

[11] In the *Federal Trade Commission Report on Corporate Mergers and Acquisitions*, May 1955, p. 174, the following statement is peculiarly apposite: "The problems connected with the collection and analysis of facts sufficient to serve as a basis for decisions as to the probable competitive consequences of an acquisition are so complex that there is strong temptation to look for simple tests. Simple formulae are, however, untrustworthy indices of competitive consequences."

recent opinion in *Tampa Electric Co.* v. *Nashville Coal Co.*,[12] furnishes further support to this position. Moreover, it is significant that the United States Court of Appeals for the Ninth Circuit in reviewing the Commission's decision in the *Crown Zellerbach* case not only made a full scale examination and analysis of all the factual material in the record, but with respect to one aspect of the proof stated "the record is most unsatisfactory and quite fragmentary, but apparently it is necessarily so." [13]

I am certainly not unmindful of the proposition that in determining whether a merger may substantially lessen competition or tend to create a monopoly the test is whether there is a reasonable probability of such anti-competitive effects nor am I unaware of the incipiency doctrine in connection with the application of the amended Clayton Act. I am also aware that we are dealing with a statute wherein the national policy clearly has been spelt out. However, we are also dealing with statutory language which in fixing the standard of illegality employs the purposefully broad language "where the effect . . . may be substantially to lessen competition, or to tend to create a monopoly." No deciding authority can with precision fix static guidelines governing the exact quantum of proof necessary to meet such a statutory requirement applicable alike to every given market setting. This is not to say that given market dominance in an oligopolistic industry any merger of significance will not contravene the statute. Given a certain market setting, a few simple compelling factors might be all that is necessary to satisfy the statutory requirement as to illegality. On the other hand, as the court said in the *Crown Zellerbach* case, "possibly more complicated tests and more extensive economic surveys may be required in some close cases." [14] But I believe that it is our duty to perform the full function and responsibility of weighing all the relevant facts of record bearing on the issues involved; and I further believe that in building a record it is the duty of the hearing examiner to be bound by established principles of relevancy and materiality.

The question remains as to the appropriate disposition of this proceeding. The Commission's opinion, giving as it does, consideration to broad aspects of economic problems and glossing over the post-acquisition realities on the crucial question probable competitive effect, has provided a simple answer. This answer was similarly arrived at by Commissioner Elman by confining consideration to certain basic statistical facts considered compelling and by refusing to consider most of the post-acquisition realities at all. Applying the princi-

[12] 365 U.S. 320 (1961).
[13] Supra, note 4.
[14] Supra, note 4.

ples previously expressed in this opinion, however, I find the questions closer and the task more difficult. At the resin level of competition the post-acquisition market realities disclose that Union Carbide's share of the market for polyethylene resin has declined; that competing producers are in a healthy position having not only operated at capacity levels but having expanded production facilities; that Visking, which prior to the acquisition was Union Carbide's principal resin customer anyhow, had increased its purchases from Union Carbide's competitors after the acquisition; and that most producers (incidentally not small businessmen but the giants of the chemical industry) testified as to continuing vigorous and dynamic competition. At the film level of competition these same market realities disclose that Visking's share of the market for polyethylene film declined; that there has been an expansion of polyethylene production facilities by competitors; that there exists a competitive situation producing today a lower price for polyethylene film than cellophane (which according to the majority view is a less satisfactory material in many applications); and that a large number of new entrants are now operating in this film manufacturing field.

Irrespective, however, of the above considerations my decision in this case turns upon another ground. In considering the film level of competition, in my judgment the hearing examiner committed fatal and reversable error which has been perpetuated by my colleagues. In applying controlling judicial precedents to the facts of record, I find the conclusion inescapable that the relevant market at the film level consists of flexible packaging materials and not just polyethylene film sold for packaging purposes. We will probably never again have before us for our guidance a case more directly in point on its facts than the *Cellophane* case.[15] The Supreme Court in that case held that cellophane did not constitute a separate market but that it was interchangeable with other flexible materials including polyethylene film and that all such materials formed part of the flexible packaging market. Any distinction that Cellophane was a Sherman Act monopoly case rather than a Section 7 anti-merger proceeding seems specious. Why should cellophane and other flexible packaging materials, including polyethylene film, form a part of the same market in a monopoly case but not in an anti-merger case. It simply does not make sense. Nor do I find any real retreat from the *Cellophane* case in later cases including the *DuPont-General Motors* case.[16] Moreover the recent case of *Tampa Electric Co.* v. *Nashville Coal Co.*,[17] further fortifies my conclusion. Indeed the Commission's opinion admits that

[15] *U.S.* v. *E.I. duPont de Nemours & Co.*, 351 U.S. 377 (1956).
[16] Supra, note 9.
[17] Supra, note 12.

"there is and will continue to be competition between polyethylene film and other flexible packaging materials." However, persuasive to the Commission is the fact that there are certain advantages in using polyethylene film over cellophane in many applications and including its lower price. To my mind these minor product advantages with respect to what are essentially competitive products constitute the essence of vital and vigorous competition. Furthermore in such a dynamic growth industry, where research plays such a prominent role, what may be a superior quality of one product today may be completely nullified by the improvements of competitive products tomorrow. The Commission's comparison of the competition between flexible packaging products to competition between cotton, silk, and linen, or brick, stone, and wood, appears ridiculous when we look at the physical exhibits in this record. (See respondent exhibits 89 through 105; 651 through 655; 658 through 663, which demonstrate that it is hardly possible to tell one from another with the naked eye.)

The hearing examiner's erroneous determination of the relevant product market at the film level of competition resulted in Commission's counsel's failure to develop the case in chief on the issue of probable competitive effect in that market. Some evidence covering this issue was adduced by respondent. Under the circumstances the public interest requires that the case be remanded and that the facts be fully explored demonstrating the competitive impact of the merger with respect to what is found here to be the relevant product market at the film level of competition—namely, the flexible packaging materials market.[18] I would therefore vacate and set aside the initial decision of the hearing examiner and remand the case to him for further proceedings consistent with the views here expressed.

FINAL ORDER

This matter having come on to be heard upon cross-appeals by the parties from the hearing examiner's initial decision; and

The Commission having rendered its decision denying the appeal of counsel supporting the complaint and partially granting and partially denying respondent's appeal; and having directed in the accompanying opinion that the initial decision be modified:

---

[18] I recognize that it is presently fashionable in certain legal circles to discuss the administrative process almost entirely in terms of "regulatory lag" and "length of legal records" and that this suggested disposition may be considered out of harmony with such an administrative approach. It should be remembered, however, that we are considering here a merger entailing potentially large economic consequences both to the public and to the private interests involved. In order to perform that task fairly and conscientiously, deciding authority cannot become hostage to legal fashions of the day.

It is ordered, That the initial decision be, and it hereby is, modified by:

(1) Striking from paragraph 69 the date "December, 1957" which appears in line twelve of the seventh subparagraph thereof and substituting therefor the date "1953";

(2) Striking from paragraph 74 the two sentences commencing on line ten with the words "It is" and ending on line sixteen with the words "polyethylene film".

It is further ordered, That the order contained in the initial decision be, and it hereby is, modified to read as follows:

It is ordered, That the respondent, Union Carbide Corporation, a corporation, through its officers, directors, agents, representatives, and employees, within one year from the date of service of this order, shall divest itself absolutely, in good faith, of all assets, properties, rights and privileges, tangible and intangible, including but not limited to all plants, machinery, equipment, trade names, trademarks, good will and business acquired by Union Carbide Corporation as a result of its acquisition of the assets of The Visking Corporation, and so much of the plant machinery, buildings, improvements and equipment, of whatever description, as has been installed or placed by Union Carbide Corporation on the premises of Visking Company Division of Union Carbide Corporation, as may be necessary to restore Visking Company Division of Union Carbide Corporation to its former status as an effective, competitive entity in the polyethylene film industry, as organized and in substantially the basic operating form in which it existed at or about the time of the acquisition, with such additional assets as may represent the normal expansion of The Visking Corporation during the time of its operation as a division of Union Carbide Corporation.

It is further ordered, That in such divestment no property above mentioned to be divested shall be sold or transferred, directly or indirectly, to anyone who at the time of the divesture is a stockholder, officer, director, employee, or agent of, or otherwise directly or indirectly connected with or under the control or influence of, respondent or any of respondent's subsidiaries or affiliated companies.

It is further ordered, That the complaint herein, insofar as it relates to the manufacture, offering for sale, sale and distribution of synthetic sausage casings, be, and the same hereby is, dismissed.

It is further ordered, That respondent Union Carbide Corporation shall, within sixty (60) days from the date of service upon it of this order, submit in writing, for the consideration and approval of the Federal Trade Commission, its plan for compliance with this order, including the date within which compliance can be effected.