The most prominent monopoly element in the market, the patent privilege, may, as is well known, be employed in many ways to limit competition beyond what is explicit in the specific grant of an individual product or process patent. In the chemicals industries the necessary expedients are of easier access than is generally the case. Original patent grants may be extended indefinitely by a judiciously timed succession of improvement patents.[17] Improvement patents in chemicals are particularly readily devised, especially where there are process patents on a continuous-flow production method. On the other hand, it is relatively easier to "patent around" existing patents by engineering small chemical changes in product composition. Whenever the product or process developed as a result of patenting-around efforts is more efficient than that developed by the original patent holder, a situation results which requires cross-licensing.[18] The negotiating of cross-licensing agreements has as an attendant hazard the introduction of the possibility of such meetings of the minds as may be incident to the making of agreements involving the mutual compromise of patent monopoly positions. Patents in the drug industry may bring about few absolute monopolies (few patented drugs are uniquely efficacious, even for a single disorder) but may provide the occasion, and the economic basis, for the development of a greater sense of community of interest in matters of price and production. So much is speculation. However, the terms of the actual patent licensing and cross-licensing agreements obtained by the Subcommittee, together with the evidence of price uniformity (not only between different brands of the same drug but also among different drugs in the same field of therapy), lend some support to such speculation.[19]

It is of course claimed by the drug makers that patents promote competition. Several relatively large drug firms have asserted that patents are a small company's best friend.[20] By this it is meant that the company in question gained monopoly power in some market and was enabled to out-grow its small, competitive beginnings.[21] This is consistent with the theory implicit in much current anti-monopoly legislation: that the remedy for the existence of monopoly power on the part of the large firms in a given market is to confer a similar degree of monopoly power on the small firms.

Really small firms, on the other hand, have testified that a patent is merely an invitation to costly litigation and the only advantage a really small firm can take of a useful patent is to sell it to a larger rival, usually for a lump sum paid-up royalty.[22] Even if a small firm were willing to face the hazards of litigation, it would lack the funds necessary to introduce even a hypothetical new product of superlative efficacy because of the needed outlay on sales promotion.[23]

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[17] Insulin is an excellent case in point. See subcomm. Report 141.

[18] This is often the case where the production of a final product requires as inputs a number of intermediate products, some of which may be capable of chemical synthesis as well as of organic cultivation or fermentation. An important example is the case of the broad-spectrum antibiotic, tetracycline, independently discovered by several drug firms at about the same time. Bristol Laboratories used a method of direct fermentation to produce tetracycline. Lederle had patented an earlier antibiotic, chlortetracycline ("Aureomycin") and had never licensed any competitor. Lederle found that by dechlorinating chlortetracycline, the resulting compound, tetracycline, had unusual antibiotic properties. The chemical dechlorination process was more efficient than direct organic fermentation, but Bristol apparently never applied to Lederle for supplies of chlortetracycline, presumably in the interest of secrecy, or in anticipation of refusal. Pfizer had done tetracycline research, and had filed a patent application, but found that Lederle had also done so. Pfizer convinced Lederle that Pfizer's claims were superior; Lederle, however, had patents on chlortetracycline, which Pfizer needed as an input for tetracycline. A mutual agreement was made, insuring both Pfizer and Lederle of a market for tetracycline, regardless of the award of the patent. Hearings on Administered Prices, pt. 24, at 13848, 13697–701.

[19] The currently pending Federal Trade Commission complaint, FTC v. Cyanamid, concerns such a point in connection with the tetracycline patent negotiations mentioned just above. The FTC charged the respondents with a conspiracy in connection with the awarding of the patent to Pfizer, and with a conspiracy in restraint of competition, operating through the subsequent patent licensing arrangements. Subcomm. Report 145–47.

[20] Testimony of Dr. P. I. Bowman, president of Bristol Laboratories. Bristol failed to get the tetracycline patent, but the mere award of a license (in 1956) seems to have been lucrative. Bristol's profits after taxes as a per cent of net worth averaged 2.9 per cent for the four years prior to licensing, but 10.3 per cent for the four years following. Hearings on Administered Prices, pt. 24, at 13835, 13858.

[21] Testimony of Henry Hoyt, president of Carter Products. In the five years prior to the marketing of its patented tranquilizer, meprobamate ("Miltown"), Carter had earned 16.8 per cent after taxes on net worth. In the next five years (1955–1959) the rate of profit after taxes averaged 41.0 per cent. *Id.*, pt. 16, at 9113, 9170.

[22] Testimony of Seymour Blackman, executive secretary, Premo Pharmaceutical Products. *id.*, pt. 14, at 8254.

[23] Testimony of Myron Pantzer, vice-president of Panray Corporation, *id.*, pt. 16, at 9372.