range of products than is allowed in the original grant. A series of improvement patents may indefinitely prolong the life of an original patent, as has occurred in the case of insulin,[9] and these are usually easy to obtain. But it is also easy to 'patent around' existing chemical patents, and if such efforts result in devising improvements on products made or processes employed by original patent holders, the logical solution is cross-licensing. Cross-licensing negotiations, involving as they do the mutual compromise of patent monopoly positions, supply the motivation for a greater sense of community of interest in price and production policies, and serve to further limit competition.[10] Drug patents may bring about few absolute monopolies, since few patented drugs are without effective substitutes, but the licensing and cross-licensing agreements prevalent among patent holders facilitate a high degree of market control from the supply side. Lack of space prevents effective documentation of patent abuses, but it may be mentioned that of the forty-two most important patented drugs, twenty-four are produced by only a single supplier.[11]

Not all ethical drugs are protected by patents, and since there seem to be no important economies of scale in production for such drugs, it would appear possible for small firms to compete. Hence the larger firms have taken measures (1) to confuse the normal flow of market information in order to prevent physicians from knowing of lower-priced sellers in the market; (2) to prevent the identification of lower-priced equivalents of higher-priced drugs, and (3) to persuade the physician that all lower-priced drugs are of hazardously low quality. These efforts have been quite successful. Small firms with little or no advertising budgets cannot make their presence known in the deluge of major firm drug propaganda.[12] Marketing tactics produce economies of scale in advertising drugs, where none exist in producing them. The second objective is accomplished by making the physician brand name conscious, and by devising and advertising generic names of drugs in such a way as to minimize the use of cheaper equivalents. Generic names are designed to be lengthy and complex; brand names are brief and euphonious. Generic names, by law, must be included in all advertising, but are usually printed in minute type face and located in anomalous places. Brand names are given great prominence and are advertised inten-

[9] Ibid., p. 141.

[10] The currently pending Federal Trade Commission complaint, *FTC* v. *American Cyanamid, et. al.*, charges the respondents with such a conspiracy in connection with the tetracycline patent negotiations, ibid., pp. 145–7. See also the discussion of the prednisone cross-licensing agreements given below.

[11] Ibid., p. 67.

[12] Selling expenses amounted to $3200 *per physician* in 1959, and constituted 24.8 per cent of sales revenue and was 77.3 per cent as large as the cost of goods sold, ibid., p. 31.