drug patent protection relate more closely to the realities of this industry. These two plans are alternative policies for the compulsory licensing of drug patents.

The first alternative is to require compulsory licensing of all drug patents after some specified period, such as 3 years.

Three years of exclusive patent protection is a reasonable period in an industry characterized by rapid product turnover and a high rate of obsolescence. Numerous studies have shown that the greatest portion of sales of any product is likely to occur in the first few years after its introduction. Company price policies explicitly take into account these considerations, and most companies, if not all, estimate very conservatively the anticipated market life of their products, usually taking 3 years as the period to recoup outlays and earn a profit.

If licensing were required after the first 3 years of a product's life, that is, after its estimated life expectancy for pricing purposes were ended, there could occur entry by other firms into that product market and, hopefully, competition in price among the rivals. Of course, beneficial results to consumers would be possible only for those products with a therapeutic or commercial life longer than 3 years, but despite the swift product turnover in this industry, data on product sales indicate that the majority of sales in any recent year represents those of products on the market longer than 3 years.

For them, the patent holder would continue earning entrepreneurial profits, though perhaps at a lower rate than before, on his own finished-product sales and those of licensees, and consumers possibly could now purchase their prescriptions at lower prices.

The impact of such a policy on research and development does not seem unfavorable; it provides a time long enough, from the companies own viewpoint, to earn profits justifying the innovational effort. It might even promote greater research and development by inducing even more rapid product turnover. In many cases, a realistic period of exclusive use and compulsory licensing at a fair royalty rate afterward seem unlikely to deter research and innovation.

My second alternative patent-licensing policy focuses on scope, as contrasted with the first alternative and its focus on duration.

This view of drug patents raises the question as to the justification for any period of exclusive patent use. The contention that none is necessary is based on the fact that a drug patent gives its owner a monopolistic position in either of two markets, that of bulk sales, that is, of drug substance itself—or that of dosage form products.

To the extent that he takes his profits in the sale of bulk or in royalties from licenses for its manufacture, he must share the market for finished products; if he retains his monopoly in the latter—the finished product market—he cannot reap profits from bulk sales or licensing, but of course, can earn substantial profits as the sole seller of finished products.

Compulsory sales of the bulk drug or licensing of its manufacture merely specifies that the patent holder must reap his gains in the bulk market rather than the final-product market; it does not take away the opportunity to earn a profit jusifying the effort behind the discovery. And entry into the preparations market would occur at the