same problem, seeking the same solution, progressing at a similar rate, is there evidence that because of the fear of a legal contest of the patent by one versus the other, they reach some agreement that one will get the patent and that he will license the others?

Dr. SCHIFRIN. Very much so. When Patent Commissioner Ladd appeared before the Kefauver committee, he pointed out that patent interferences—that is, where companies contest a patent application made by another company—are more frequent in chemical and chemical-related industries than any other industry. That is fact one.

The second fact, and this came from, I think, Mr. Federico, who was with Commissioner Ladd, is that a patent interference results in a very careful scrutiny of a patent application. In a high proportion of these cases, it turns out that the result is unpatentability. That is, a decision that the patent should not be awarded. Large firms are researching along these similar lines. They attempt to test the patent application, because rewards for getting a patent are very high in this industry. Hence, the major firms that have pursued parallel lines of research, often permit a patent applicant to go ahead unchallenged and to get his patent. But the other large firms, for not challenging that patent, will get licenses to produce it. In other words, they will share the patent among three or four firms rather than have nobody get the patent. So licensing is a result of these agreements not to test patents by the large firms.

Senator NELSON. When you say they share the patent, you do not mean that three companies, more than one company, gets the patent in their name?

Dr. SCHIFRIN. No, but as a condition for withdrawing from the interference, the companies that withdraw get licensing privileges.

Senator NELSON. Is that a violation of the antitrust laws in any way?

Dr. SCHIFRIN. Well, I would say that in a considerable number of these cases, the licensing agreements have been accompanied by price-fixing agreements. We have seen that in meprobromate, and in tetracycline. We have seen it several times through the industry, that the cooperation involved in cross-licensing is a very tempting circumstance to lead to a—if not an overt, at least a tacit price-fixing agreement. The tetracycline is a notable example of these things.

Senator NELSON. I notice that there is more than one type of case. I have seen instances where one company gets the patent and licenses two others who have been working in the same area, doing parallel research. Then there are cases where one company gets the patent and licenses anybody who wants to be licensed for all practical purposes.

Dr. SCHIFRIN. Those are rare.

Senator NELSON. There are some; are there not?

Dr. SCHIFRIN. Yes, reserpine, I think, is the outstanding example.

Mr. GORDON. Dr. Schifrin, if the large companies will not test the validity of the patents owned by other large companies, and if small companies can't do it because of the litigation expenses, then who is going to protect the public against the possibility of invalid patents being used to reap monopoly profits?

Dr. SCHIFRIN. Mr. Gordon, as of now, the answer to that is nobody does. The FTC, in its tetracycline case a few years ago, under section 5 of the Federal Trade Commission Act, did consider a fraudulent pa-