Dr. Hornig. I would say that surely political boundaries are not the natural boundaries for pollution problems.

Mr. Fulton. That is my point.

Mr. Dadario. Dr. Hornig, in the instances of conflict—and we need not get into it too deeply—during the course of our hearings it was spelled out that in the area of pollution there was an opportunity offered to our whole free enterprise system to involve itself. Through the development of competitive demands, goods would be produced which would be made available to the market. There would be a stimulus through our profit system which would help to bring the problem together once we were able to develop necessary techniques.

In the area of patents, these agencies which you talk about all take a different point of view even though there is a Government patent policy which does involve, as it should, and allow, as it should, a certain amount of discretion to the head of each agency. But the Department of Interior, as an example, is extremely rigid in this regard. You see here the possibility that one agency may not allow the free consumer system to operate as well as other agencies. This could be a

serious area of conflict.

Dr. Hornic. As you well know, Mr. Chairman, the question not only in this area but generally of how we should handle patents derived from Federal investments in research and development, has been a long and controversial one. At present it is pulled together by President Kennedy's patent policy of 1963. Now, there is a general principle which I think is, by and large, observed by the agencies. Just what is done, I might say, is affected by a wide variety of specific legislation affecting the agencies one at a time, which in part directs them to have different policies. So it has been very difficult to produce uniformity.

At any rate, where public money has been invested in producing a commercial product, and this applies to much of this area, in general the patent rights are not left with the performer, under the present policy. There has been some discussion as to whether in these cases where the Federal Government assumes the principal rights, whether in order to obtain commercial development exclusive licenses might

be issued, but at the moment there is no policy in this regard.

Mr. Daddario. My question then comes down to this: Do you see this

as falling within your phrase here of "instances of conflict"?

Dr. Hornig. Oh, yes. I think that in this general area of the disposition of Government patents it surely was an instance of conflict, both among our agencies and within the Congress and the public.

Mr. Daddario. I understand that is so. I was trying to focus upon how it might affect the subject we are talking about because the record does appear to be clear. We are seeking ways and means to get more involvement here. It is, therefore, incumbent on us to look at those conflicts which might in fact deter and prevent the wider involvement

of industry in the solution of this particular problem.

Dr. Hornig. Yes. I would like to add that I consider this a central problem, since I think, and I believe you do, that much of the research, and particularly technological development, ought to be carried out by industry. There is a major question of how we provide suitable incentives in the private area to carry this out, and the patent policy is surely involved deeply in this question of incentives. There is by no means agreement on what kind of incentives are proper to both stimulate industry and protect the public interest.