Government Orders

water, and all of these systems. That is what these bright people do in this integrated circuit topography.

But without having any patent protection they tend to move off to other countries to do that where there is already patent protection for them. What this bill does is to give to the 25 companies that are spread out across this country, in many of the ridings of hon. members in all three parties, patent protection so they will make the investments here and build these microchips here so we can play a part in that world industry. It is the industry of the future and the words of which I do not even understand. However, I understand the concepts. It is real, and I guess we have to get into it.

Certainly, young people understand it. I know that when my son and daughter they sit down at their computers seem to understand this stuff instinctively. Frankly, think I would rather hire somebody else to do it for me.

Mr. John Manley (Ottawa South): Mr. Speaker, one never knows in the practice of federal politics in Canada what one may be doing on a given day. I must say that to be before the House today to speak about integrated circuit topographies is a very pleasant surprise for me.

I am happy to say that we are able to support Bill C-57, which gives protection to integrated microcircuit topography. I am also happy to say that perhaps because I am younger than the previous speaker I do happen to understand what it is, largely because of my previous occupation when I had the task of acting as lawyer on behalf of some of the companies in the national capital region which engage in the design and production of integrated microcircuits. I am aware that this is a very important aspect of our high technology industry.

We are supporting this bill, but I think the presentation of it in the House today gives us an opportunity to think about a few other things which are related, not just to the microcircuit technology itself, but to Canada's role in the globally competitive world. What we face at this time is a challenge to our ability to increase our standard of living, to maintain our standard of living and the kinds of advantages that Canadians have come to enjoy. That challenge arises not so much from within as from the world outside our borders.

It is true that Canada has achieved very high levels of growth of economy in relation to other OECD countries.

What Canada has failed to do in comparison with many of our competitors is to increase our rate of productivity.

In Canada we lag behind our major trading competitors in growth in productivity. This reflects the fact that for many years now in Canada we have failed to invest to the extent that we need to do so in education, research and development, and science–based innovation.

While we welcome a bill like Bill C-57, which is going to give protection to some of the high-tech companies both in the national capital region, of which I am proud, and in other parts of Canada—we need it and support it—it is too little, too late.

What we need in Canada is a government that has a vision for science and technology, a government that has some clue where it wants to go in the world.

Why can we not set as a challenge for Canadian industry to be the best in the world in environmental technologies by the year 2000? Why are we not setting up within the Government of Canada a plan of action to move us forward in the new technologies?

Why is it at a time when we are suffering from shortages in the high technology areas of skilled and qualified people we are cutting back transfer payments for post-secondary education? Why is it that we are going out to compete in the world with an arm tied behind our back?

The reason is that there has been a lack of vision and willingness to act. Bill C-57 is great and we support it. What we need is more bills like it and more initiatives to show the way to the future for Canadian industry and Canadian technology.

It is with a great deal of scepticism that we hear that the Prime Minister of Canada is receiving an award for his contribution to research and development.

Some hon. members: Oh, oh!

Mr. Manley: When compared with eight comparable countries, our gross R and D expenditures as a percentage of GDP is the lowest at 1.42 per cent. Our industry funded R and D as a percentage of GDP is the lowest at .76 per cent. Government funded R and D is the second lowest at .34 per cent. In terms of government performed R and D we are at about the middle. In higher education R and D we are the lowest at .32 per cent. In terms of the number of domestic patents granted per