UK academic inventions

NRDC may lose first option on patentable ideas

INVENTORS in UK universities and research institutions will have rights of control over patentable ideas arising from their work if the proposals now being considered by the government are implemented. The change is intended to be a significant stimulus to encourage the transfer of technology from the universities to industry.

The proposals, contained in an inter-departmental report, would abolish the current automatic right of the National Research and Development Corporation (NRDC) to take first refusal on patents arising from publicly funded research. Rights would go instead to the funding bodies — such as the research councils — which would then pass them on to the universities and scientists concerned. These ideas are believed to have strong support at Cabinet level (notably from Industry Secretary Patrick Jenkin and Education Secretary Sir Keith Joseph) and could be approved within weeks if the Treasury can be persuaded to agree.

NRDC has faced a lot of criticism since it was created in 1949, mainly for being too slow in evaluating ideas submitted to it (delays of more than a year have been quite common) and for being financially too conservative, putting its resources into safe money-spinners (such as the cephalosporin antibiotics) while failing to take on some more risky projects. In 1981 the Advisory Council on Applied Research and Development produced a report criticizing NRDC's role, suggesting that its monopoly over patent rights was against the public interest because of the delays it introduced and because it had failed to educate would-be innovators in the realistic appraisal of their ideas.

However, since NRDC became linked two years ago to the National Enterprise Board (in a merger not yet complete) to form the British Technology Group (BTG), a number of changes have been made which seem generally to have improved its image. NRDC at present invests its own money in selected projects, and also seeks outside support for others; officials are quick to point out that NRDC has to be prudent with its own investments because although it has a £50 million overdraft facility it is still required to show a profit each year. Although a spokesman admitted that, given the choice, BTG would probably have preferred to keep the NRDC monopoly, it is making a virtue out of necessity by saying that the proposed changes would enable it to be "more selective" in future investments.

A spokesman for the Committee of Vice-chancellors and Principals said the universities would welcome the first refusal option on promising developments, but added that BTG's services would continue to be used by both universities and research councils for handling patent applications, where it has "unparalleled expertise". BTG will also continue to play an important role in supporting capital-intensive projects, while universities will increasingly make their own arrangements with entre-

preneurial companies to develop smaller-scale ideas — exactly the sort of link that is already developing in some universities and which the government is anxious to foster. Universities would gain from royalty-sharing agreements with inventors but are unlikely to risk their own capital.

Dr John Midgley, who started the University of Edinburgh's very successful patenting and licensing scheme, is delighted with the proposals. He points out that while NRDC-supported projects in Edinburgh have made £27,000 for the university over thirty years, the patenting and licensing scheme has forged links with industry and raised some £250,000 in 10 years: he sees Edinburgh as an example of what more universities must do. The new plans should make it easier for them to do it, and may produce substantial returns for the research councils, who are starting to realize they may have been missing out.

Tim Beardsley

US high-energy physics

Budgetary shenanigans

Washington

THE Department of Energy (DoE) is trying to resolve the budgetary confusion left by Congress's hasty action last month that, in the words of the agency's high-energy physics director, threatens "complete and utter disaster".

Although the director, Dr William Wallenmeyer, says he is "optimistic that something will be worked out", a full restoration of funds to the high-energy physics programme may require Congress to take the politically difficult step of re-opening action on the 1983 budget. Such action is made even more unlikely by the congressional leadership's reluctance to reopen debate on the controversial Clinch River breeder reactor, which is part of the DoE budget.

On the other hand some members of Congress may find themselves persuaded of the vitality of particle physics in Europe and the need to bolster the US effort by the news, last week, of the probable discovery of the intermediate vector boson at the European Centre for Nuclear Research in Geneva (see page 285).

The problems began when Congress failed to pass a regular appropriation bill for most of DoE's programmes, including high-energy physics. The hastily constructed catch-all spending bill that Congress passed just before adjourning for Christmas in effect froze DoE's spending at 1982 levels, despite the Administration's request to increase funds for high-energy physics from \$364 million to \$429 million. The Administration wanted to balance this and other increases with cuts in spending on solar, conservation and fossil energy programmes.

Some adjustments appear possible without resorting to congressional action. According to a staff member of the House

of Representatives Appropriations Committee, some unspent funds from 1982 could be shifted to high-energy physics, and the multi-year financing of the national laboratories will also provide some flexibility. But these adjustments would still leave DoE's general science and research fund — of which high-energy physics consumes the lion's share — about 5 per cent short of the Administration's request. Money could not be transferred from solar energy to general science and research without the approval of Congress.

Dr Leon Letterman, director of DoE's Fermilab, said that he has had to exercise some caution in his spending as a result of the uncertainty over the budget. "We are nervous about it", he said. "I'm moving at a pace somewhere between the worst that could happen and the President's request." Letterman said that although he could recover everything he has so far spent should the worst happen, he will have to begin cutting back projects "if we don't get definitive action within a matter of weeks".

Letterman noted that "everyone realizes it was a mistake", but no-one seems to know quite what to do about it. In an ironic deviation from the usual budget tangles that federal agencies face, Congress, the Office of Management and Budget and the affected agency are all in apparent agreement that funding should be increased.

One possible solution would be for Congress to pass a so-called "no-cost supplemental" to the budget, which would simply authorize DoE to reprogramme the funds already appropriated. The Administration is expected to make a decision very shortly — probably before the President's proposed 1984 budget is announced on 31 January — on what action to seek.

Stephen Budiansky