THIS STATEMENT REFLECTS THE VIEWS OF THE AUTHOR AND DOES NOT NECESSARILY REFLECT THE VIEWS OF THE SECRETARY OF THE NAVY OR THE DEPARTMENT OF THE NAVY.

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STATEMENT OF ADMIRAL H.G. RICKOVER, U.S. NAVY TO THE SUBCOMMITTEE ON THE CONSTITUTION OF THE SENATE COMMITTEE ON THE JUDICIARY

JUNE 6, 1979

## UNIVERSITY AND SMALL BUSINESS PATENT PROCEDURES ACT.

THANK YOU FOR INVITING ME TO TESTIFY ON "THE UNIVERSITY AND SMALL BUSINESS PATENT PROCEDURES ACT."

ONE STATED PURPOSE OF THE BILL IS TO ESTABLISH A UNIFORM FEDERAL PATENT PROCEDURE FOR SMALL BUSINESSES AND UNIVERSITIES. As I understand it, the bill provides that, in almost all cases, small businesses and universities may elect to retain title to inventions developed under their Government contracts; the Government keeps a nonexclusive license to use the invention for Government purposes.

IF THE GOVERNMENT SUBSEQUENTLY DETERMINES THAT THE CONTRACTOR IS NOT EFFECTIVELY TAKING STEPS TO ACHIEVE PRACTICAL APPLICATION OF THE INVENTION WITHIN A REASONABLE TIME, THE GOVERNMENT WOULD HAVE SO-CALLED "MARCH-IN RIGHTS", UNDER WHICH THE GOVERNMENT CAN REQUIRE THE PATENT HOLDER TO LICENSE THE INVENTION TO OTHERS.

IF IN 10 YEARS A SMALL BUSINESS OR UNIVERSITY MAKES MORE THAN \$250,000 IN AFTER-TAX PROFITS FROM LICENSING THE INVENTION, OR \$2,000,000 ON SALES OF PRODUCTS INCORPORATING THE INVENTION, THE GOVERNMENT IS ENTITLED TO A SHARE OF ALL ADDITIONAL PROCEEDS UP TO THE AMOUNT OF GOVERNMENT FUNDS SPENT IN MAKING THE INVENTION.

IN MY OPINION, GOVERNMENT CONTRACTORS - INCLUDING SMALL BUSINESSES AND UNIVERSITIES - SHOULD NOT BE GIVEN TITLE TO INVENTIONS DEVELOPED AT GOVERNMENT EXPENSE. THESE INVENTIONS ARE PAID FOR BY THE PUBLIC AND THEREFORE SHOULD BE AVAILABLE FOR ANY CITZEN TO USE OR NOT AS HE SEES FIT.

In private industry, the company that pays for the work generally gets the patent rights. Similarly, companies generally claim title to the inventions of their employees on the basis that the company pays their wages. In doing business with the Government, however, these same companies reverse the standard, contending that the patent rights should belong to the one who comes up with the idea, not the one who foots the bill.

IN RATIONALIZING THEIR CLAIM FOR TITLE OR EXCLUSIVE RIGHTS TO GOVERNMENT FINANCED INVENTIONS, CONTRACTORS OFTEN USE THE AGE OLD ARGUMENTS OF THE PATENT LOBBY; THEY CLAIM THAT THE GOVERNMENT IS STIFLING TECHNOLOGY BY RETAINING TITLE TO APPROXIMATELY 25,000 PATENTS; THAT THESE PATENTS REFLECT WORTHWHILE IDEAS THAT ARE NOT BEING USED; THAT WITHOUT PATENT PROTECTION COMPANIES WILL NOT COMMERCIALIZE THESE INVENTIONS; AND THAT THE PUBLIC THEREFORE DOES NOT GET THE BENEFIT OF THE GOVERNMENT'S R&D EXPENDITURES.

GENERALLY, THESE ARE THE ARGUMENTS OF PATENT LAWYERS, CONTRACTORS, AND THOSE UNABLE TO FIND SPONSORS FOR THEIR INVENTIONS. TRULY GOOD IDEAS TEND TO BE USED. THE REASON SO MANY GOVERNMENT-OWNED AND PRIVATELY-OWNED PATENTS ARE NOT USED STEMS FROM CONSIDERATIONS OTHER THAN THE NEED FOR MONOPOLY PATENT RIGHTS.

A vast majority of patents are of little or no significance. Many companies seem to file patents defensively; meaning that they file numerous patents for minor details primarily to keep someone else from getting a patent in that area or to discourage potential competitors. Some people file patents as status symbols; others simply misjudge the attractiveness of their ideas. The Patent Office itself, when in doubt, tends to patent questionable items on the assumption that, if the patent becomes important, the validity of the patent can be tested in court.

Finally, it is almost impossible to tell the extent to which patented inventions are being used, particularly in the case of Government-owned patents. Government agencies do not have a reason to search for patent infringement. The Government, unlike private parties, generally has no desire to prevent others from using its inventions. The reasons the Government should take title to these inventions are primarily to ensure the Government is not subsequently barred by someone else's patent from using the idea; to preclude the

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ESTABLISHMENT OF A PRIVATE MONOPOLY FOR A PUBLICLY FINANCED INVENTION; AND TO ENSURE THE PUBLIC HAS EQUAL ACCESS TO THESE INVENTIONS.

PATENTS ARE GENERALLY INCIDENTAL TO GOVERNMENT RESEARCH correct AND DEVELOPMENT WORK, NOT ITS PRIMARY PURPOSE. WHEN I PLACE AN R&D CONTRACT FOR A NEW DESIGN REACTOR, IT IS PRINCIPALLY TO WORK OUT THE DETAILS OF A DESIGN AND TO IDENTIFY AND RESOLVE THE PROBLEMS OF DESIGN, MANUFACTURE, AND OPERATION. IF PATENTABLE INVENTIONS ARISE IN THE COURSE OF THIS WORK, THEY GENERALLY INVOLVE ONLY SMALL DESIGN FEATURES, NOT ENTIRELY NEW CONCEPTS, THE BILL HOWEVER SEEMS TO BE BASED ON THE NOTION THAT THE GOVERNMENT-OWNED PATENTS ARE PREDOMINANTLY GOOD IDEAS WHICH GOVERNMENT AGENCIES SHOULD TRY TO FORCE OUT INTO THE MARKET PLACE. THE BILL STATES "IT IS THE POLICY AND OBJECTIVE OF THE CONGRESS TO USE THE PATENT SYSTEM TO PROMOTE THE UTILIZATION OF INVENTIONS ARISING FROM FEDERALLY SUPPORTED RESEARCH OR DEVELOPMENT...." AND TO "PROTECT THE PUBLIC AGAINST NON-USE OR UNREASONABLE USE OF INVENTIONS," (EMPHASIS ADDED)

Under this bill, Government agencies would be expected to promote actively the inventions that it now owns and those that arise under new contracts. The bill further requires that the General Accounting Office audit these agencies annually and report to the Congress on their progress in this effort.

IN MY OPINION, THE BILL OVEREMPHASIZES THE IMPORTANCE OF PATENTS AND, IF ENACTED, WOULD TEND TO DIVERT ATTENTION AND RESOURCES OF THE GOVERNMENT AGENCIES AWAY FROM THEIR MAIN FUNCTIONS. MOST AGENCIES HAVE ENOUGH TROUBLE DOING THE JOB THEY WERE ESTABLISHED TO DO; THEY SHOULD NOT BE REQUIRED TO SPEND THEIR TIME AND RESOURCES TRYING TO PROMOTE PATENTS OF DUBIOUS VALUE. I BELIEVE THAT THE DECISION TO USE OR NOT USE GOVERNMENT FINANCED INVENTIONS IS ONE BEST LEFT FOR THE PRIVATE SECTOR.

THE BILL INCLUDES SOME SAFEGUARDS WHICH I BELIEVE WOULD BE CUMBERSOME AND INEFFECTIVE. THE FIRST INVOLVES THE GOVERNMENT'S ABILITY TO FORCE WIDE SPREAD LICENSING UNDER ITS SO-CALLED "MARCH-IN" RIGHTS, IF A CONTRACTOR WHO HOLDS TITLE TO A GOVERNMENT FINANCED INVENTION WERE NOT SATISFACTORILY DEVELOPING AND PROMOTING IT. THE GOVERNMENT HAS HAD MARCH-IN RIGHTS SINCE 1963, BUT TO MY KNOWLEDGE HAS NEVER USED THEM. ASJE TO BE IN A POSITION TO EXERCISE THESE RIGHTS A GOVERNMENT AGENCY WOULD HAVE TO STAY INVOLVED IN THE PLANS AND ACTIONS BICC OF ITS PATENT HOLDERS AND CHECK UP ON THEM, LE-A GOVERNMENT PROVIDES AGENCY EVER DECIDED TO EXERCISE ITS MARCH-IN RIGHTS AND THE PHURTS PATENT HOLDER CONTESTED THE ACTION, NO DOUBT THE DISPUTE COULD BE LITIGATED FOR YEARS. FOR THIS REASON I BELIEVE THIS SAFEGUARD IS LARGELY COSMETIC. IT WOULD RESULT IN MUCH ADDITIONAL PAPERWORK BUT WOULD PROBABLY BE USED NO MORE THAN IN THE PAST.

A SECOND CUMBERSOME AND PROBABLY INEFFECTIVE SAFEGUARD INVOLVES THE PROVISIONS FOR RETURN OF GOVERNMENT INVESTMENT, HE PROPOSED PROCEDURE INVOLVES KEEPING TRACK OF HOW MUCH THE GOVERNMENT INVESTED IN THE INVENTION AND WHAT AFTER-TAX PROFITS A CONTRACTOR HAS MADE OVER A TEN YEAR PERIOD FROM LICENSING AGREEMENTS OR DIRECT MANUFACTURING ASSOCIATED WITH THE INVENTION, SINCE THERE ARE NO FIRM STANDARDS FOR CALCULATING THESE FIGURES, THE LIKELIHOOD OF MANIPULATION AND DISPUTES IS GREAT. TO COMPLY WITH PROVISIONS OF THIS BILL, GOVERNMENT AGENCIES WOULD HAVE TO SET UP ORGANIZATIONS; ISSUE AND IMPLEMENT REGULATIONS; PROMOTE PATENTS; REVIEW AND AUDIT CONTRACTOR PATENT DEVELOPMENT AND UTILIZATION PLANS; INTERVENE WHEN THESE PLANS ARE NOT CARRIED OUT; NEGOTIATE AGREEMENTS; AUDIT BOOKS AND RECORDS, I BELIEVE THAT THESE REQUIREMENTS WILL BE EFFECTIVE ONLY IN ADDING MUCH UNNECESSARY PAPERWORK,

Contractors and patent lawyers often claim that contractors will decline Government work if they are not given title to patents they develop under the Government contract. My experience has been that Government patent policy is rarely the dominent factor in company decisions to accept or reject work. Businessmen tend to value the tangible benefits of profits and technical know-how from Government orders more than the speculative benefits of patent rights. For more than 30 years I have been able to

OBTAIN THE R&D AND MANUFACTURING WORK NEEDED FOR THE NAVAL NUCLEAR PROPULSION PROGRAM WITHOUT HAVING TO GIVE AWAY There are a for the second s

Although S414 is supposed to be about universities and small businesses, there is another part of the bill, Section 208, which would establish patent licensing procedures applicable to all contractors, both large and small. Under this Section, Government agencies would be specifically authorized to grant exclusive licenses to use Governmentowned inventions. Under the bill, the General Services Administration is authorized to prescribe the regulations governing such licensing. In the past, questions have arisen as to the legal authority of various Government agencies to grant exclusive licenses to title in such inventions. To waive the Government's rights to title in such inventions. This bill would resolve these questions in favor of being able to give away Government patent rights.

JUDGING FROM THE PAST PERFORMANCE OF MANY GOVERNMENT AGENCIES, THE ATTITUDE OF THE DEPARTMENT OF COMMERCE, AND THE INFLUENCE OF LARGE CONTRACTORS IN INDIVIDUAL GOVERNMENT AGENCIES, THERE IS NO DOUBT IN MY MIND THAT THE REGULATIONS WOULD BE WRITTEN TO ENCOURAGE THE GRANTING OF EXCLUSIVE PATENT RIGHTS TO GOVERNMENT CONTRACTORS. THE BILL REQUIRES GOVERNMENT OFFICIALS TO MAKE CERTAIN FORMAL DETERMINATIONS PRIOR TO GRANTING EXCLUSIVE LICENSES. HOWEVER, THE BILL PROVIDES A

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FRAMEWORK UNDER WHICH GOVERNMENT AGENCIES COULD RATIONALIZE THE GRANTING OF EXCLUSIVE LICENSES TO LARGE CONTRACTORS. EITHER BY GETTING GOVERNMENT AGENCIES TO WAIVE ITS PATENT RIGHTS, AS AUTHORIZED UNDER SOME OF THE PRESENT LAWS, OR UNDER THE LICENSING REGULATIONS THAT WOULD EVOLVE UNDER THE PROPOSED BILL, MANY LARGE CONTRACTORS WOULD BE ABLE TO OBTAIN--PERHAPS AT THE OUTSET OF THE CONTRACT--TITLE OR EXCLUSIVE LICENSES TO INVENTIONS DEVELOPED UNDER THEIR CONTRACTS WITH THE GOVERNMENT. THIS SHOULD BE PROHIBITED.

These licensing provisions of this bill are identical to the language proposed to the House Science and Technology Committee during the previous session of Congress as part of a bill to promote technology. That bill and a similar one that was reintroduced recently are aimed at giving both large and small contractors exclusive rights to inventions developed under their Government contracts. It appears that these same interests are trying to take advantage of the small business and University title of S.414 to achieve what they so far have failed to achieve in these other bills.

IN SUMMARY, I BELIEVE THAT INVENTIONS PAID FOR BY THE GOVERNMENT SHOULD BELONG TO THE PUBLIC, AND ALL CITIZENS SHOULD HAVE AN EQUAL OPPORTUNITY TO USE THE INVENTIONS. PRIVATE FIRMS, PARTICULARLY LARGE COMPANIES, SHOULD NOT BE ABLE TO GET A 17 YEAR MONOPOLY ON INVENTIONS THEY DEVELOP

WITH TAX DOLLARS. WHEN GOVERNMENT AGENCIES ROUTINELY GRANT CONTRACTORS EXCLUSIVE RIGHTS TO USE SUCH INVENTIONS, IT PROMOTES GREATER CONCENTRATION OF ECONOMIC POWER IN THE ENDERCE? HANDS OF LARGE CORPORATIONS; IT IMPEDES THE DEVELOPMENT AND DISSEMINATION OF TECHNOLOGY; IT IS COSTLY TO THE TAXPAYER; AND IT HURTS SMALL BUSINESS,

I TESTIFIED IN MORE DETAIL ON THE GENERAL SUBJECT OF GOVERNMENT PATENT POLICY AS IT AFFECTS SMALL BUSINESS BEFORE THE SENATE SMALL BUSINESS COMMITTEE ON DECEMBER 19, 1977. WITH YOUR PERMISSION, MR. CHAIRMAN, I WOULD APPRECIATE HAVING THAT STATEMENT INCLUDED AS PART OF MY TESTIMONY TODAY.

I RECOGNIZE THAT DESPITE MY CONVICTIONS ON THIS SUBJECT, THERE OFTEN IS STRONG SENTIMENT IN THE CONGRESS TO DO SOMETHING SPECIAL FOR SMALL BUSINESSES OR UNIVERSITIES. IF YOU DO DECIDE TO PROVIDE MORE FAVORABLE TREATMENT FOR THEM, I RECOMMEND THAT YOU DO SO IN A MANNER WHICH ENSURES THAT SMALL BUSINESSES AND UNIVERSITIES, RATHER THAN LARGE CONTRACTORS, IN FACT HAVE PRIORITY OR AT LEAST EQUAL ACCESS TO INVENTIONS DEVELOPED AT GOVERNMENT EXPENSE. TO ACCOMPLISH THIS, I RECOMMEND THAT S. 414 BE MODIFIED AS FOLLOWS:

(1) REQUIRE THAT THE GOVERNMENT RETAIN TITLE TO ALL INVENTIONS DEVELOPED AT GOVERNMENT EXPENSE.

(2) GIVE SMALL BUSINESSES AND UNIVERSITIES AN AUTOMATIC 5-YEAR EXCLUSIVE LICENSE TO INVENTIONS THEY DEVELOP UNDER

THEIR GOVERNMENT CONTRACTS. AT THE END OF THIS PERIOD THE INVENTION WOULD FALL IN THE PUBLIC DOMAIN. THIS WOULD PROVIDE LIMITED PROTECTION BUT NOT A 17-YEAR MONOPOLY. IT WOULD ALSO OBVIATE THE NEED FOR THE CUMBERSOME SAFEGUARD PROVISIONS OF THE PRESENT BILL, E.G. "MARCH-IN RIGHTS," "RETURN OF GOVERNMENT INVESTMENT," AND THE VAST ADMINISTRATIVE EFFORT ASSOCIATED WITH THEM.

(3) REVISE THE PREAMBLE TO ELIMINATE ANY IMPLICATION THAT GOVERNMENT AGENCIES SHOULD (A) ACTIVELY AND INDISCRIMINATELY PROMOTE ALL INVENTIONS ARISING FROM FEDERALLY SUPPORTED RESEARCH OR DEVELOPMENT, AND (B) "PROTECT THE PUBLIC AGAINST NON-USE...OF INVENTIONS." ONLY A SMALL PORTION OF THE INVENTIONS PATENTED BY GOVERNMENT OR INDUSTRY TURN OUT TO BE WORTHWHILE.

(4) PROHIBIT AGENCIES FROM WAIVING THE GOVERNMENT'S RIGHTS TO TAKE TITLE TO PATENTS DEVELOPMENT AT GOVERNMENT EXPENSE. WHENEVER SUCH WAIVERS ARE GRANTED, SMALL BUSINESSES OR OTHER FIRMS ARE FORECLOSED FROM THE OPPORTUNITY TO USE THE INVENTION.

(5) PROHIBIT CONTRACTS WHICH AUTOMATICALLY PROVIDE TO THE CONTRACTOR EXCLUSIVE LICENSES TO ANY INVENTIONS DEVELOPED UNDER THE CONTRACT, EXCEPT AS INDICATED IN PARAGRAPH (2) ABOVE. OTHER FIRMS SHOULD AT LEAST HAVE AN EQUAL OPPORTUNITY TO USE THE INVENTION NON-EXCLUSIVELY OR BID FOR THE EXCLUSIVE RIGHT TO USE IT.

(6) REQUIRE THAT THE COMMERCE DEPARTMENT PUBLICIZE THE AVAILABILITY OF PATENTS TO WHICH THE GOVERNMENT HAS TITLE FOR A PERIOD OF SIX MONTHS. IF NO ONE REQUESTS A NON-EXCLUSIVE LICENSE, THE RIGHTS TO AN EXCLUSIVE LICENSE COULD BE GRANTED TO THE HIGHEST BIDDER WITH SMALL BUSINESSES HAVING PRIORITY IN THE BIDDING.

(7) ELIMINATE THE STATUTORY REQUIREMENT FOR THE GAO TO CONDUCT AN ANNUAL REVIEW OF AGENCY PERFORMANCE IN THE AREA OF PATENTS. IT DOES NOT SEEM APPROPRIATE TO INCLUDE THIS AS A PERMANENT REQUIREMENT OF THE LAW.

In my opinion the effects of Government patent policy are continually exaggerated and overplayed by the patent lawyers and contractors who have a vested interest in the matter. Proposed changes regarding ownership and use of patents developed at Government expense are always presented under the banner of high sounding principles and purposes. Having observed this issue for many years, I am thoroughly convinced that almost all of such proposed changes are contrary to the best interests of the United States.

The basic principle embodied in present laws is that the Government should have title to inventions developed with Government funds. That is a sound principle I fully support. It should be modified, waived, or otherwise tampered with only for compelling reasons--and even then with great care and in the most limited way needed to accomplish the purpose.