

Neff's retirement from the Illinois General Assembly. After 22 years of dedicated service to his many constituents in Wester, IL, Clarence has decided that its time to go into a working retirement at home in Stronghurst, IL with his lovely wife, Elaine; son, Chuck; and daughter, Janice.

Clarence Neff is recognized as one of the finest, most trusted and most respected public servants that the State of Illinois has ever produced. There is nothing flashy about Clarence's political style; he operates quietly and behind the scenes. But, after 22 years of maintaining this low political profile, Clarence has accomplished more in the way of providing excellent constituent services and delivering necessary transportation projects to the people of his district than any other public servant I know of.

For all of his public years, Clarence has held true to one eloquent principle: helping people is the substance of politics; the friends you make, its decoration. And, there are few people in our great State more deserving of praise and recognition than Clarence Neff. It is truly a political blessing in Illinois politics to have Clarence Neff counted as one of your friends and allies.

Mr. President, it is my privilege and distinct honor to join with friends throughout the State of Illinois in saying "thank you" to Clarence Neff for 22 years of outstanding and dedicated public service. ●

TRADEMARK CLARIFICATION ACT OF 1984

● Mr. DOLE. Mr. President, I have just been informed that the House has concurred in the Senate amendments to H.R. 6163, which passed the Senate on October 3. I would take just a few moments to express my appreciation for the expeditious consideration of the bill, as amended, in the House and my support for the package of legislative items that it contains.

H.R. 6163 has become the vehicle for an important collection of measures in the areas of patent, trademark, and copyright law and court improvements. The items that make up that package include the Trademark Clarification Act of 1984, the Semiconductor Chip Protection Act, the Patent Procurement Policy Act, State Justice Institute, civil priorities clarification, the District Courts Organization Act, and a group of technical amendments to the Federal Court Improvements Act of 1980. Each of these items had been more than adequately considered in both House and Senate in the normal course of the legislative process before inclusion in H.R. 6163.

I take particular interest in the provisions of title V of the bill. This title amends various sections of title 35, U.S. Code that govern the ownership and licensing of patent rights to inventions developed by individuals working for or with universities or other non-

profit institutions that operate Government laboratories on a contract basis.

This Senator has been involved with this issue for a number of years, beginning in the late 1970's when the problem of inadequate commercialization of inventions developed with Government research and development dollars first came to my attention. I worked closely with our former colleague, Senator Bayh of Indiana, in shaping legislation that initiated a change in the philosophy in favor of Government ownership of inventions that had prevailed in the agencies up to that time. In studying the question of why so few Government patents have seen the light of day in the marketplace, where their benefits can be returned to the public in the form of new products and new jobs, it became apparent that agency rules requiring Government ownership were the crux of the problem. Our work led to the passage, in 1980, of the Patent Law Amendments Act of that year, Public Law 96-517. That legislation established—for the first time—a rule in favor of contractor ownership of inventions developed under Federal research contracts. Due to some concerns, however, over precisely how well the new policy would work, the 1980 law was limited in its application to universities and small businesses.

The 1980 amendments to the patent laws spurred a quantum leap in the number of new inventions patented by universities and small business operating under such contracts. Prior to the passage of Public Law 96-517, university invention disclosures had shown a steady decline. Now, such disclosures are up by a substantial percentage, university and industry collaboration is at an all time high, and many new technologies—such as recent advances in gene engineering—are creating new opportunities for economic advancement while improving the quality of life.

In spite of this success story, it has become apparent during the past 4 years that the 1980 law can be improved. Moreover, there are important areas of Government research that were not covered by the 1980 legislation that will benefit from an application of its principle of contractor ownership. The objectives of the new legislation are to improve upon the 1980 law with regard to universities and expand its reach to the Government contract laboratories managed by the Department of Energy, which have so far been exempted from the reach of the 1980 law by agency regulation.

Mr. President, I will not take the time now to detail the changes in law that are provided for in title V of H.R. 6163. I ask that a colloquy between myself and Senator DeCONCINI, one of the cosponsors of the legislation, and a sectional analysis of title V appear at the conclusion of my remarks in the RECORD. I want also to express my thanks for the support of Senator

LAXALT on the bill, and the assistance of Senators HATCH, MATHIAS, HEFLIN, and LEAHY and their staffs for their work in helping to move this legislation off the Senate floor. I would also note for the record the invaluable assistance rendered by Congressmen KASTENMEIER, FISH, and MOORHEAD in securing approval the House floor.

The material follows:

SUMMARY OF MAJOR PROVISIONS CONTAINED IN TITLE V OF H.R. 6163

1. S. 2171 allows agencies to limit patent ownership by small business or nonprofit organizations that are not located or do have a place of business in the United States. This will clarify that agencies can control the export of technology in cases where the performer is not a domestic organization.

2. S. 2171 repeals the P.L. 96-517 provision excepting inventions made by nonprofit organizations when operating Government-owned laboratory facilities. This provides for uniform treatment of all domestic nonprofit organizations regardless of where they perform their federally funded work and is particularly important to organizations that manage Department of Energy laboratories.

3. As part of the change affecting nonprofit contractors of Government-owned facilities, S. 2171 includes a limit on the amount of royalties that the contract operators are entitled to retain after paying patent administrative expenses and a share of the royalties to inventors. The limit is based on five percent of the annual budget of the laboratory, but includes an incentive provision rather than a simple cap to stimulate continued efforts to transfer technology if royalties ever reach the five percent figure. This provision ensures that Government shares in the results of its research expenditures in the event the contract operator of a Government laboratory makes a major discovery.

4. S. 2171 includes the favorable reporting provisions that were developed in OMB Circular A-124. These provisions have been proven to work. Small business and nonprofit organizations should be assured of their continuance beyond February 1985 when A-124 is scheduled for sunset expiration.

5. S. 2171 repeals certain conditions placed on licensing of inventions by nonprofit organizations. Among the conditions repealed is the five year cap on the grant of an exclusive license to an industrial concern (other than a small business). This provision has made the licensing and development of invention that require Food and Drug Administration approval prior to marketing difficult to negotiate. Its repeal will remove a substantial barrier to industry participation in research projects at universities and other nonprofit organizations.

6. The authority to issue regulations under P.L. 96-517 is consolidated by S. 2171 from the General Services Administration and the Office of Management and Budget into the Department of Commerce. This consolidation is consistent with other Commerce responsibilities for creating an environment favorable to the commercialization of the results of federally-funded research.

7. S. 2171 expands the definition of "invention" in P.L. 96-517 to include—"any novel variety of plant which is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321 et. seq.)." This assures nonprofit organization ownership of some inventions resulting from research in agriculture which were not previously covered by P.L. 96-517.

SECTIONAL ANALYSIS

SECTION 501

Subsections (1) and (2) expand the definition of "invention" in P.L. 96-517 to include—"any novel variety of plant which is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321 et. seq.)." This assures nonprofit organization ownership of some inventions resulting from research in agriculture which were not previously covered by P.L. 96-517.

Subsection (3) allows agencies to limit patent ownership by small business or nonprofit organizations that are not located or do not have a place of business in the United States. This will clarify that agencies can control the export of technology in cases where the performer is not a domestic organization. The section also repeals the P.L. 96-517 provision excepting inventions made by nonprofit organizations when operating Government-owned laboratory facilities. This provides for uniform treatment of all domestic nonprofit organizations regardless of where they perform their federally funded work and is particularly important to organizations that manage Department of Energy laboratories. Finally, the section adds a new sub "(iv)" to 35 U.S.C. 202(a) that would exempt laboratories which focus on nuclear propulsion work or nuclear weapons development from contractor ownership requirements.

Subsection (4) creates an oversight in the Department of Commerce of agency use of the exceptions to small business or nonprofit organization invention ownership.

Subsection 4A amends 35 U.S.C. s. 202(b) to bring agency determinations on questions of contractor ownership within the provisions of 35 U.S.C. s. 203(2).

Subsection (5) includes the favorable reporting provisions that were developed in OMB Circular A-124. These provisions have been proven to work. Small business and nonprofit organizations should be assured of their continuance beyond February 1985 when A-124 is scheduled for sunset expiration.

Subsection (6) provides assurance that agencies can protect information provided to the Government on their invention utilization efforts.

Subsection (7) and (8) repeal certain conditions placed on licensing of inventions by nonprofit organizations. Among the conditions repealed is the five year cap on the grant of an exclusive license to an industrial concern (other than a small business). This provision has made the licensing and development of inventions that require Food and Drug Administration approval prior to marketing difficult to negotiate. Its repeal will remove a substantial barrier to industry participation in research projects at universities and other nonprofit organizations.

Subsection (8) also places a limit on the amount of royalties that the contract operators of Government-owned laboratories are entitled to retain after paying administrative expenses and a share of the royalties to inventors. The limit is based on five percent of the annual budget of the laboratory, but includes an incentive provision rather than a simple cap to stimulate continued efforts to transfer technology if royalties ever reach the five percent figure. This provision ensures that the Government will share in the results of its research expenditures in the event the contract operator of a Government laboratory makes a really major discovery.

Subsection (9) assures that a dispute which arises under either a grant or a contract will be handled in a similar manner by the Federal agencies, and provides for Judicial review of agency decisions.

Subsection (10), (11), (12) consolidate the authority to issue regulations under P.L. 96-517 from the General Services Administration and the Office of Management and Budget into the Department of Commerce. This consolidation is consistent with other Commerce responsibilities including creating an environment favorable to the commercialization of the results of federally-funded research. In addition, section (11) provides to the Department of Commerce certain information clearinghouse functions that will enable the Department to better serve the needs of the Federal agencies.

Subsection (13) assures that no agency will be permitted to waive the normal license retained by the Government or the capability to march-in in accordance with P.L. 96-517 in any situation where a Federal contractor elects to retain ownership of an invention made with Federal support.

Subsection (14) prohibits the agency retention of patent rights in any invention developed under an educational grant. The scope of the provision includes all types of such grants and it is intended to be a complete ban upon retention or rights by grant-or agencies.

Subsection (15) makes appropriate caption changes.

COLLOQUY CONCERNING THE PROVISIONS OF
TITLE V OF H.R. 6163

Senator DeCONCINI. I would like to ask the Senior Senator from Kansas a few questions about the provisions of Title V of H.R. 6163, passed by the Senate on October 3rd and by the House on October 9th, 1984. I know that he was the principal sponsor of this legislation as well as the principal sponsor of P.L. 96517, which Title V amends. First, would you please explain how this bill will affect Government owned laboratories that are operated by university or other nonprofit contractors?

Senator DOLE. The answer to this question has three parts. First, P.L. 96-517 gave nonprofit organizations the right to own inventions made with government research and development funding. That law included, however, an exception allowing the Government to retain title to inventions made by the nonprofit contractors of Government owned laboratories. In the main, this bill removes that exception and allows nonprofit contractors to own their federally funded inventions regardless of whether they are made at their own or at Government owned facilities.

Second, most Federal agencies that have nonprofit organizations operating their laboratories have not been using the Government owned, contractor-operated (GOCO) exception and are allowing the contract operators to own their inventions. The Department of Energy, however, has made a blanket use of the GOCO exception, so the bill primarily affects the nonprofit DOE lab operators. "For profit" contractors, such as the operators of labs at Sandia and Oak Ridge, are not directly affected by this bill.

Third, this bill includes a provision that allows the Department of Energy to own the inventions related to DOE's naval nuclear propulsion or weapons related programs that are made in the labs that are primarily dedicated to these programs. This means that, for example, inventions in these categories made at Los Alamos or Lawrence Livermore could be owned by DOE. Inventions that do not fall into these categories would be owned by the nonprofit contractors.

Senator DeCONCINI. In the case of Los Alamos, which is operated by a contractor based in another State, who specifically would manage inventions that do not fit in

the nuclear propulsion or weapons categories?

Senator DOLE. This bill contains a provision that requires, to the extent it provides for the most effective technology transfer, that the licensing of subject inventions shall be administered by contract employees on locations at the facility. Acting under the Stevenson-Wydler Act, Los Alamos has established a particularly strong technology transfer office and program that is administered at the lab site.

In addition, it is our intent that title to inventions being licensed should be held in the name of a wholly owned subsidiary running the facility for the Government so that in the event of a change of contractors, the licensing rights may be transferred intact to the successor organization as a continuing operation of the contract laboratory.

Our intent is that the laboratory should deal directly with State agencies or foundations and the private sector on invention ownership and technology transfer problems.

Senator DeCONCINI. Is it possible that some inventions outside the specific categories just mentioned but produced in the DOE contract labs should be kept secret for national security reasons? If so, should not the Department of Energy retain title to them?

Senator DOLE. This is an important question, and there is a great deal of misunderstanding about it. It is likely that some inventions outside of naval nuclear propulsion and weapons related programs will be classified or placed under Patent Office Secrecy Orders. But national security protection is not compromised by who owns the invention. When a Secrecy Order is placed on a patent application, the application is locked up in a vault in the Patent Office and no patent is issued so long as the Order is in effect. The Department of Energy can call for a Secrecy Order and will have control over how long it is maintained. So even if a contractor is entitled to own and invention, the contractor can not obtain a patent until the Secrecy Order is lifted. If the invention is also classified, the contractor is bound by law to control access to it and information about it. Many agencies—including the Department of Defense—have contractors that perform classified research and development. These agencies experience no particular difficulties in routinely allowing contractor ownership of inventions affected by Secrecy Orders or which are classified.

Contractor ownership can actually improve the chances of avoiding accidental disclosure of new technology. The financial incentives of patent ownership cause both researchers and their employers to review their work for possible inventions of commercial value before writing articles for publication. In cases where an application is filed, there is another safety check. The Patent Office has a unit that reviews applications for those might involve national security. Every year, this unit flags thousands of applications, many of which have passed security reviews, for the agencies to consider and determine if a Secrecy Order is needed. This is an effective process that safeguards hundreds of inventions a year.

In short, there is no reason why title to such inventions should necessarily be retained by the Department of Energy.

Senator DeCONCINI. I also note that some changes have been made in the procedures regarding oversight of agency use of the exceptions to contractor retention of title in 35 U.S.C. 202(b). What is the purpose of these changes?

Senator DOLE. Though changed, paragraphs (b)(1) and (2) are substantially similar to the existing provisions, except that the Department of Commerce, rather than the General Accounting Office, will maintain regular oversight over the use of exceptions. However, the GAO is still charged with annually reviewing overall implementation of the Act. A new paragraph (4) has also been added which gives the contractor the right to access to the courts when he believes the agency has abused its discretion in exercising an exception.

Senator DeCONCINI. Why have more detailed reporting, election, and filing provisions been substituted in 35 U.S.C. 202(c)?

Senator DOLE. The new provisions in 35 U.S.C. 202(c)(1)-(3) are based on the standard clause now in use under OMB Circular A-124, which implemented P.L. 96-517. This specificity is intended to eliminate any future arguments concerning the intent of the Congress. We had thought that the Senate Report on the current provisions of P.L. 96-517 was clear but this did not prevent resistance from some agencies.

Senator DeCONCINI. And what about the revision of 35 U.S.C. 202(c)(4)?

Senator DOLE. 35 U.S.C. 202(c)(4) deals with the license rights reserved to the Government. The process of implementing P.L. 96-517 revealed some ambiguities concerning the rights the Government could retain in order to honor foreign commitments. This change clarifies that the agency may retain more than a mere license in foreign rights if this is what is necessary to honor a treaty. At the same time the amendment is intended to clarify the types of foreign agreements covered by section 35 U.S.C. 202(c)(4) and to require an agency to tie its use of this right to a foreign treaty or agreement that is in existence at the time the contract is executed. The current language includes "future treaties," which is too open ended and can place a cloud over the foreign rights retained by the contractor.

Senator DeCONCINI. I applaud the addition of the small business preference language in section 202(c)(7). How is it intended to work?

Senator DOLE. Basically, it is intended to place a duty on nonprofit organizations to seek small business licensees. However, it recognizes that in many cases this will not be feasible either because no small businesses are interested or because those that are may lack the resources necessary to bring the invention to the market. We expect the universities to make good faith efforts to license small business firms but to retain the discretion to choose large firms over small businesses in cases when they have legitimate concerns over the capabilities and financial resources of a small business firm. The burden is on the nonprofit contractor, of course, to make a reasonable inquiry as to the suitability of small business licensing.

Senator DeCONCINI. What is the purpose of the new language that has been added to the march-in rights section?

Senator DOLE. The language that has been added to 35 U.S.C. 203 has two main purposes. First, there is currently some confusion as to whether march-in determinations are subject to the Contracts Dispute Act and therefore reviewable by Boards of Contract Appeals. Current regulations imply they are. This has created a dichotomy in agency procedures between grant and contract inventions.

The proposed language will take march-in decisions out of the Contract Dispute Act so that the same procedures can be used under grants and contracts. It is also intended to make clear that review of march-in decisions should be done by policy officials at the agencies, with a view toward the pur-

poses of his legislation. It is strictly a matter of legal interpretation.

Finally, this language makes express the unstated assumption in the current law that march-in determinations are reviewable by the courts.

Senator DeCONCINI. A new section 212 has been added covering fellowship and other awards having educational purposes. I would have thought that the agencies would not claim patent rights in non-research projects. Why is this necessary?

Senator DOLE. You are correct in your assumption; however, some agencies nevertheless claim patent rights in awards that are made to help educate or train scientists. This amendment is intended to stop this practice. This will be true even if the fellowship involves university research.

I should note that it is rare for inventions to be made exclusively by educational grant recipients, and government retention of rights in such cases has made established inventors unwilling to train such individuals for fear of government retention of rights if the student is listed on the patent application as a co-inventor with the professor or employer.

Senator DeCONCINI. It is my understanding that many federally funded inventions are either being developed or currently marketed under licensing requirements far more restrictive than those in this bill. What is the effect of this legislation on the licensing requirements applicable to these inventions?

Senator DOLE. While this bill encourages the full development of new federally-funded inventions by authorizing exclusive licenses for the life of the patent, you are correct that many inventions were discovered and are being marketed under the terms of Institutional Patent Agreements or the provision of Public Law 96-517, before the current amendments, which provided for a maximum of five years of on-market exclusivity. This restriction, if continued, will place older inventions at a competitive disadvantage with newer ones, for which more lengthy exclusivity is permissible, and may well result in the failure of these older inventions to be fully developed for the benefit of the public.

It is our intent, in enacting this legislation, to create a uniform patent and licensing policy applicable to all federally-funded inventions. Although the bill is silent on the question of retroactivity, it is certainly our intent to strongly encourage agencies administering university patents filed before the current amendments to permit companies marketing products under these patents to extend their exclusive licenses for the life of the patent, consistent with the provisions of this bill, provided that the companies that request such an extension have complied with the requirements of the IPA and have acted responsibly in commercializing the invention.

Senator DeCONCINI. I think the Senator from Kansas for his clarifying remarks.

NATO: HONING THE GRAND STRATEGY

● Mr. LUGAR. Mr. President, I would like to share with all my colleagues an article which was written by David Abshire, U.S. Ambassador to NATO, and published in the Wall Street Journal on Wednesday, September 12. This article brings to light the NATO Alliance's grand strategy and focuses in particular on four key factors that motivate that strategy: Political dynamics, military deterrence, resources, and

public diplomacy. I ask that this article be printed in the RECORD.

The article follows:

NATO: HONING THE GRAND STRATEGY

(By David M. Abshire)

BRUSSELS.—A popular refrain of critics of the North Atlantic Treaty Organization is it does not have a comprehensive strategy. After serving as U.S. Permanent Representative to the North Atlantic Council for more than a year, I would reject this criticism. The alliance does have a strategy—indeed, a grand strategy—and has been actively adjusting it to realities of the 1980s.

This question is especially timely in light of the first official visit to the U.S. by NATO's new secretary general, Lord Carrington. A former foreign and defense secretary of the United Kingdom, Lord Carrington brings impressive skills and experience to his new post. He has signaled a special commitment to strengthening the overall strategy of the alliance.

Grand strategy is not just a military concept. It also encompasses political, economic, and even public affairs elements—all the force that can be brought to bear to achieve the strategy's end. In the West's case, the end is clearly stated in the preamble of the 1949 North Atlantic Treaty, which affirms the allies' determination to unite in a collective defense of "the freedom, common heritage and civilization of their peoples." These goals continue today, 35 years later, to be the binding force of the alliance. They motivate allied strategy, which centers on four key factors: political dynamics, military deterrence, resources and public diplomacy.

Political Strategy. Soviet strategy during the drama over deployment of intermediate-range missiles was not only to divide Europe from America but also to divide Europe within itself. Soviet intimidation was equaled only by that displayed during the Cuban missile and Berlin crises. Yet, to the Kremlin's surprise, NATO remained united in defense of peace in freedom.

After the high point of the missile drama, the NATO Council agreed to a proposal by Belgian Foreign Minister Leo Tindemans calling for a detailed assessment of the last 17 years of East-West relations—a study that led to the June NATO Foreign Ministers' "Washington Statement on East-West Relations." The allies agreed that in the early years of detente substantial progress was made in reducing tension, spurring trade and expanding the East-West dialogue. However, they concurred that Moscow's relentless arms buildup, aggression in Afghanistan and pressure on Poland have in more recent years caused a serious deterioration in East-West relations. Thus, they saw a need to fine-tune political strategy by paying closer attention to requirements of restraint, reciprocity and accountability in a "more realistic and constructive dialogue."

The allies have been actively trying to stimulate the dialogue with the East by advancing a host of new proposals this year—at ongoing negotiations in Stockholm, Vienna and Geneva. In contrast, the Soviets continue to boycott negotiations on nuclear weapons. Nevertheless, when the Soviets do decide to return to the negotiating table, they will find interlocutors prepared to talk.

Deterrence Strategy. NATO is the first great alliance in history ever to have a clear-cut deterrence strategy.

In the wake of sustained debate in the early 1980s on both sides of the Atlantic, it is generally agreed that NATO's strategy of "flexible response" and forward defense remains the best available. That strategy is meant to deter an aggressor from thinking he might gain objectives militarily at an ac-