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Larry Gilbert  
Milt Goldberg  
Shelly Steinbach  
Nells Reimers

Gentlemen:

Attached you will find some interesting commentary which you may have already seen. Nevertheless, I thought that because of its close relationship to the Dole-Bayh proposed legislation I would err on the side of duplicating material which may already be in your hands.

The material from the Patent, Trademark and Copyright Journal (BNA) looked like there might be a logical connection as pointed out by the PTC Journal comment. Norm Latker has told me, however, that Jerry Sturgis has taken quite a negative attitude toward the proposed legislation and that the report would not seem to reflect his current posture. You can get further information from him if you like.

The Ewing article is somewhat disturbing in that the general impression it conveys is that the Antitrust Division is not going to change its basic position from that which it has espoused since 1947. I also see in the Ewing article the provisions of the proposed Baruch administrative bill and the general approach that "anything the contractor can do the government can do better." If you think I have erred in my interpretation of the Ewing remarks please let me know keeping in mind that Mr. Ewing is Robert V. Allen's boss (the gentleman in the Antitrust Division who has been charged with reviewing the Justice Department's posture on government patent policy).

Very truly yours,

Howard W. Bremer  
Patent Counsel

HWB:rw  
Enc.

bc--Pike-Woerpel-Hinkes

## CONGRESS WANTS MORE R&D CONTRACTS TO BE FUNNELED TO SMALL BUSINESSES

Concerned that small, innovative businesses are being shortchanged with respect to the granting of Government research and development contracts, House and Senate Small Business panels have issued a joint report indicating that Congress may take action if the Administration fails to remedy the situation.

The report, the product of joint hearings held last August, charges that the underutilization of small businesses in the yearly award of \$20 billion in federal R&D funds "is contrary to the national interest." In releasing the report, Senator Gaylord Nelson (D-Wis.), Chairman of the Senate Small Business Committee, noted that while small firms have consistently accounted for about half of all technological innovations, they have received only 3.4% (\$700 million) of the federal research and development contracts awarded each year. What is needed, said Nelson, is "an affirmative program to seek out the qualified small R&D firms and get the benefit of their great resourcefulness." If the Executive Branch does not "get on with the job," he warned, "Congress will move ahead."

According to Nelson, the Executive Branch has known for more than ten years (ever since the 1967 Charpie Report) that half the innovations in this century originated from small businesses. Moreover, a recent Office of Management and Budget report that detailed the "striking record of innovation" of small businesses "sat on the shelf and gathered dust" for 18 months. See 399 PTCJ A-5. Both reports recommended greater small business participation in federal R&D. If either of these reports had been implemented, Nelson declared, "the country would be closer to solving some of its basic problems."

The National Science Foundation, Nelson continued, found that for the 1953-73 period, the smallest firms (under 1,000 employees) produced about four times as many major innovations per R&D dollar as the middle-size firms and 24 times as many as the largest firms (over 10,000 employees). In Nelson's estimation, therefore, "Federal agencies \* \* \* get more for the buck when they have their research conducted by small business."

Representative John Breckinridge (D-Ky.), who co-chaired the August hearings, said: "It makes no sense that small business receives such a paltry amount of the funds earmarked for a function that it performs best \* \* \*. If small business creates more than one-half the innovations and does it for one-half the costs, why doesn't small business receive more than one-half the federal research and development funds?"

Findings and recommendations from the report (House Report No. 95-1829), "Underutilization Of Small Business In The Nation's Efforts To Encourage Industrial Innovation," appear in text at page D-1. (Ed. Note: The Senate Report, No. 95-1413, bears the same title but has some minor differences in wording.)

**PTCJ COMMENT:** Reports like this one are increasing the militancy of small business organizations, and these groups can be expected to play an important role when Congress considers patent policy and federal contract issues. In fact, the fortunes of one patent proposal, the Dole-Bayh bill (S. 3496, 396PTCJ A-10, D-1) could well be influenced by these latest congressional findings.



# BNA'S PATENT, TRADEMARK & COPYRIGHT JOURNAL

TEXT

## FINDINGS AND RECOMMENDATIONS OF CONGRESSIONAL REPORTS ON UNDER-UTILIZATION OF SMALL BUSINESS IN FEDERAL R&D

### CHAPTER IV.—FINDINGS

The state and trends of technological innovation in this country and the world, and the ramifications of these trends are complicated matters. It is beyond the scope of this initial report to comment definitively on these broader issues. Pursuant to the Presidential Review, the resources of about 28 Executive agencies are presently engaged in this endeavor. The Committees hope that the marshalling of our background information and source material will encourage and assist the President and others to undertake and advance their own analyses.

The Committees hope that at an early stage there will be a clear and convincing statement of the problems facing the U.S. technological innovation, and the role of small business in their solution.

But, the contributions of smaller businesses to U.S. technology is a subject within the long time and special expertise of these Committees. On the basis of the decade and one-half of attention, including the current 1978 hearings, the Committees feel qualified in expressing the following findings:

1. Increased technological innovation has been recognized by the President and the Congress as a pressing national need.

2. From all of the available evidence, small business has consistently accounted for about one-half of all major U.S. inventions and innovations in this century. In the words of the March 1977 OMB overview study, which analyzes 75 of the principle studies of this subject, small business has compiled a "striking record of innovation," particularly in view of their limited share of economic resources.

In the opinion of our Committees, the near unanimity of views of all of the scholars, government agencies, and panels which have examined this matter over the past dozen years and have come to the same conclusions is remarkable.

3. Empirical studies have shown that smaller business is not only a prolific producer of innovation, but a more efficient producer than larger business as well. The statistics show that scientists and engineers are about one-half as expensive to maintain in smaller businesses than in larger businesses, and produce four times the number of innovations per workers than do larger businesses.

4. Small and particularly new enterprises occupy the critical role in the innovation process, that of linking ideas and innovation to the marketplace. The very definition by the National Science Foundation of the term "innovation" as making the product available for general use, validates this function. This suggests and the Committees find that the market linkage function of small enterprises, their problems and potential, should be receiving the very highest priority treatment in the nation's effort to encourage and strengthen technological innovation.

5. On these grounds, the 1977 OMB study found that the fiscal year 1975 small business share of 7.8 percent of Federal R&D contracts going to industry and 3½ percent to all performers of R&D constitutes under-utilization of small enterprises in the nation's efforts to encourage technological innovation and the Committees also so find.

6. Congress believes that since government policy is a prime moving force in procurement generally, and in R&D spending in particular, changes are necessary to bring the resources of small business forcefully to bear on the solution to the Nation's innovation problem. Public Law 95-507, which has recently been signed into law by the President and which mandates that the head of each Federal agency shall, after consultation with the Small Business Administration, establish goals for the participation by small business concerns in procurement contracts of each agency having values of \$10,000 or more, is in expression of this belief.

7. The Executive agencies such as the National Science Foundation and NASA, which have administered their research program under statutory and regulatory guidelines for small business participation, testified that numerical or percentage goals are helpful in achieving higher small business funding levels in government research programs. The statement of the Office of Federal Procurement Policy is also to this effect.

8. The experience of the prime government agencies concerned with procurement—the Office of Federal Procurement Policy, the National Science Foundation, the National Aeronautics and Space Administration, and the Department of Defense—which is part of the records of the August 9th and 10th hearings indicates that increased participation by small business in government research strengthens rather than weakens the overall quality and output of these programs since: "Small

businesses . . . probably give us more for our (R&D) money than large businesses do."<sup>101</sup>

9. In this light, the Committees fail to understand the lack of action for 18 months by the Executive Branch on its comprehensive report of March 10, 1977 urging the greater utilization of smaller business to encourage new technology. The OMB finally published this report on September 20, 1978, more than a month after it was first released by the two Congressional Small Business Committees in connection with the August 9 and 10, 1978 hearings.

This action becomes even more difficult to understand when viewed in light of the President's concern over the decline of technological innovation within our nation's economy. However, the Committees are heartened by the recent commitment by OMB to the increased utilization of small businesses in our nation's innovation effort, and will be monitoring subsequent actions to assure adequate results.

10. With respect to the Presidential Review of Innovation, the Committees gained the impression that the Small Business Administration, which is the voice in the executive branch of the Federal Government of 14 million small enterprises which account for half of U.S. innovation, was consulted hardly at all in the design of the Presidential study, and that its representation on the working organs of the study was quite limited until Congress became active in the area; for example, small business representatives were not included in the Advisory Committees of the Study when they were first created.

Further, the Congressional Small Business Committees, which have expressed an interest in the subject, have sought and are still seeking to become active participants in achieving the national goal of increased technological innovation through small business and otherwise. However, the Committees do not feel that they are encouraged by the Executive Branch to continue these efforts to foster U.S. technological innovation either in support of the President's Study and/or through their own independent efforts.

11. The Committees find that for many years the Executive Branch has displayed little or no interest in utilizing small business as a means of encouraging greater technological innovation and development, which has been declared a national goal. An analysis of small business participation in government-wide procurement programs, which stands at 26 percent, and research and development funding which stands at a mere 7.8 percent for industry and 3.5 percent overall, sustains this finding. This is further substantiated not only by the inaction on the OMB Report, but also by the lack of emphasis by Government witnesses and spokesmen on the possibilities of encouraging innovation through small business, and the related lack of concern and action over the trends of reduced creation of new technology companies, capital formation, and other problems confronting those which have managed to come into existence.

12. An exception to this lack of action are the programs of the National Science Foundation, especially "Small Business Innovation Applied to National Needs," as described in this Report. Although the overall goals of small business participation were mandated by Congress, the agency designed and implemented these programs with skill and imagination, and they have resulted in significant contributions to small business R&D funding. After evaluating the results, the Foundation concluded that: "Small business is a major contributor to innovation and economic growth. We believe it to be in the national interest that programs to increase the participation of small business receive careful study and increased support."

13. Accordingly, the Committees find that particularly under present economic circumstances, the present under-utilization of valuable small business resources for promoting greater innovation is unjustifiable and is contrary to the national interest. In this regard, this finding has particular application to the Departments of Defense and Energy which have the two largest R&D budgets in the Federal Government.

14. Under the circumstances, where a clear national need for more technological innovation has been expressed, and a clear record that greater utilization of small business could provide a major part of the response to this need, and this fact appears to be substantially unacknowledged, these questions arise: whether the findings of the Presi-

<sup>101</sup> Quotation is from testimony of Deputy Under Secretary of Defense, Dale W. Church at the Hearings, quoted in this Report above at page 22. For the conditions of the other departments and agencies see: Office of Federal Procurement Policy, OMB, this Report, page 24; National Science Foundation, this Report, page 17; and NASA, this Report, page 19.

dent's study will accord small business the recognition it deserves, and whether the recommendations of this Study will be structured so that small business will receive the major and effective measure of encouragement and support that its record has so conclusively earned and its potential so compellingly merits.

The answers to these questions will be in the findings and recommendations of the executive branch and their implementation. The two Committees look forward to reviewing these findings and recommendations as well as to the actions of the executive branch in the course of the Presidential Review and other actions, against the background of the joint hearings and this report.

#### CHAPTER V.—RECOMMENDATIONS

1. Because the Presidential Review of Innovation will be important in the development of the R&D policy for the executive branch of the Federal Government the Committees recommend that small business should be represented in proportion to its contribution to the nation's innovation effort.

While the review is in progress, both the Small Business Administration as the voice of small business in the government, and the President's Science Advisor as the voice of the White House, should make recommendations in an effort to assure that this representation is adequate in quantity and quality. Subsequently, the adequacy of such representation and resultant input should be the subject of comment in the annual report of the SBA to the Congress.

2. The prior studies discussing the relationship of small business to innovation should be made available to each of the participants in the review process. The Committees' hearing record containing extensive appendices which include all of the studies cited in this report as well as other documents would be available for this purpose to the extent they may be useful.

3. Because executive branch policy decisions and actions during the course of the Presidential Review are also very consequential, the two Committees urged, in a joint letter of August 11, 1978, that the initial recommendation of the March 1977 OMB Study that each Federal agency should "develop formal programs which encourage the increase of Federal R&D awards to technology-based firms," should be implemented at once.

In the opinion of the two Committees, such plans are basic to any national effort to expand innovation and can be used as a building block in any set of recommendations which emerges from the current Presidential Review of Innovation. The September 20th OFPP Memorandum asking for review, support and a six month report from each agency on progress in implementing the report's recommendations is a positive step in the direction sought by the two Committees.

The Committees would appreciate being able to review these plans at an appropriate time in the future.

4. The Committees take note that P.L. 95-507 mandates that the head of each Federal agency shall, after consultation with the Small Business Administration, establish goals for the participation by small business concerns in procurement contracts of such agency having values of \$10,000 or more.

In light of the findings that small business contributes half of the nation's innovation; that the OMB recommends that the utilization of small business be increased in government contracting; and that in view of the program of the National Science Foundation which has found it feasible to raise the small business share of research awards from 1½ percent in 1971 to 12½ percent in 1978 without any diminution in quality with numerical guidelines as a material factor since 1976, the two Committees recommend that in the setting of such overall R&D award goals the Administration should use the above-mentioned experience of the National Science Foundation as a model in setting separately stated small business R&D funding goals that will effectively assure such small businesses R&D funding will be raised to reasonable minimum percentage levels within appropriate time frames.

Such a recommendation is believed to be fully warranted at this time by the findings of this report.

5. The Committees recommend that all of those involved with the Presidential Review and with the existing machinery of federal procurement policy and administration keep before them the observation of the Charpie report to the Department of Commerce of 1967 that:

From a number of different points of view, we are persuaded that a unique cost-benefit opportunity exists in the provision of incentives aimed at encouraging independent inventors, inventor-entrepreneurs, and small technologically based businesses. The cost of special incentives to them is likely to be low. The benefits are likely to be high.

6. The Presidential Review mechanism should be used as a vehicle for both forwarding and implementing findings and recommendations as they are agreed upon. For example, early publication of findings which are fully supported by the record may improve the climate for consideration of later recommendations, so that all concerned can get the best possible start on accomplishing the national goal of increased innovation.

7. The two Committees decline at this time to make specific recommendations as to the level of small business R&D contracting either government-wide, or within specific agencies. The Committees at this point have not yet studied those matters in sufficient depth to make such judgments except that it is possible to conclude that these levels are presently too low. However, the Committees feel that the expertise of the current Presidential study can be of material assistance in resolving these questions.

8. At an appropriate future time, the two Committees will wish to review this area, in light of reactions to this report and the results of the current Presidential Review. If the Executive Branch does not develop and achieve appropriate small business R&D targets within a reasonable time, the Committees will re-open the question of percentage standards for small business by hearings and otherwise. Such an inquiry would be instituted with a view to formulating legislative proposals for the purpose of implementing the goals of increased technological innovation—which appears to be agreed upon by the President and the Congress—by strengthening the small business half of the innovation process.

-- End of Section D --