### Ronald Reagan Presidential Library Digital Library Collections

This is a PDF of a folder from our textual collections.

Collection: Gunn, Wendell W.: Files

Folder Title: Semiconductor Industry Meeting US

Chamber of Commerce 02/28/1984 (binder)

(3 of 3)

Box: OA 9642

To see more digitized collections visit: <a href="https://reaganlibrary.gov/archives/digital-library">https://reaganlibrary.gov/archives/digital-library</a>

To see all Ronald Reagan Presidential Library inventories visit: <a href="https://reaganlibrary.gov/document-collection">https://reaganlibrary.gov/document-collection</a>

Contact a reference archivist at: <a href="mailto:reagan.library@nara.gov">reagan.library@nara.gov</a>

Citation Guidelines: <a href="https://reaganlibrary.gov/citing">https://reaganlibrary.gov/citing</a>

National Archives Catalogue: <a href="https://catalog.archives.gov/">https://catalog.archives.gov/</a>

#### THE OECD HIGH TECHNOLOGY INITIATIVE BACKGROUND PAPER

#### ISSUE:

The U.S. Government strongly supports the work program on high technology mandated at the 1982 OECD ministerial. Since the U.S. originally pushed for this initiative, we have taken a leading role in encouraging a strong and rigorous analysis of problems which may arise in trade in high technology products. Our strategy emphasized the need to increase member governments' awareness of practice and policies that may interfere with free and fair international trade in high technology products. Such policies not only generate trade frictions among member countries, but they may also hinder the flows of new technologies across international boundaries.

#### BACKGROUND:

The OECD is not a rule making or rule enforcing body and cannot serve as a substitute for GATT discussions on the adequacy of current rules of trade in this area. However, the OECD often provides solid, critical analyses of particular trade issues. Sometimes this process can lay the groundwork for possible improvements in the international trading system. The Government Procurement Code, for example, had its beginning in OECD studies which later evolved into the basis for agreement in the Tokyo Round.

From the onset, our objective was to have the OECD produce an inventory of government domestic policies or instruments which may lead to trade distortions in high technology industries. We resisted efforts to produce a definitive list of high technology products and processes, recognizing such a list would be obsolete in a very short time.

Three committees (Science and Technological Policy, Industry, and Trade) were tasked with the responsibility of carrying out the Ministerial mandate. To date, the bulk of the work has been of a sectoral nature. A Joint Bureau of the Industry Committee and Committee on Science and Technological Policy (CSTP) has completed a review of trade issues in six sectors (pharmaceuticals, machine tools, microelectronics, robotics, telecommunications, and space). The Joint Bureau has also drafted a report to Ministers which concludes that trade problems do exist in high technology and lays the groundwork for continued OECD investigation of this issue beyond the May Ministerial. (This document is still undergoing review and is subject to critical analysis by other delegations and redrafting by the Secretariat).

Efforts to rank-order the various types of government measures which can lead to distortions in high technology trade and thereby focus the OECD efforts on the critical issues--subsidies, procurement and standards--have been resisted by several countries. Delegations

have argued that it is premature to attempt to rank-order the problems; that the trade issues themselves need to be reformulated; that the problems are not "unique" to high technology; and that existing instruments (e.g. MTN Codes) are adequate to address these problems.

#### FUTURE DIRECTIONS

Our overall objective is to secure Ministerial endorsement of further work in 1984, with a request for a final report on trade problems in high technology due for the 1985 Ministerial. We expect the bulk of the work to fall in the Trade Committee's court. Their work should be to narrow the field of problems under discussion to those where the trade impacts are most significant. Of greatest importance is the need for the Trade Committee to turn to a review of possible solutions in the light of the uncertain effectiveness of the existing multilateral trade institutions in dealing with these problems. Such a review is critical to our long-term objective of ensuring free and fair international trade in high technology products.

JPGradoville 2/21/84 ID 270

M

- -- The U.S.-Japan Work Group on High Technology Industries is the principal forum for discussing bilateral trade problems in high technology industries.
- -- For the past year, the Group has focused on bilateral trade problems in the semiconductor sector. We have consulted closely with our industry, have relied on them to identify U.S.-Japan semiconductor trade problems, and have worked closely with them to develop solutions.
- -- We now have a concrete plan of action in the form of recommendations adopted by the High Technology Work Group in November 1983, which both governments have endorsed. The Recommendations commit the Japanese government to take steps necessary to improve U.S. semiconductor presence in Japan, both in sales and in direct investment.
- -- The November recommendations call for:
  - Mutual elimination of tariffs on semiconductors: Japan's Tariff Deliberation Council has already approved the action; it now goes before the Japanese Diet for passage. On the U.S. side, the measure has been attached to the Miscellaneous Tariff Bill, which awaits Senate floor action. We are optimistic that the Bill will pass both houses.
  - o A joint data collection system to monitor semiconductor trade at a very detailed level.
  - o Japanese Government guidance to domestic semiconductor users to procure from foreign (especially U.S.) firms.
  - o Enhanced exchange of patent information: Patents and related documents on both sides are being automated and will be exchanged in machine readable form for more timely access.
  - o Greater U.S. access to Japanese technical documents resulting from MITI-sponsored R&D. Negotiations are underway between MITI's Agency for Industrial Science & Technology and the National Technical Information Service.
  - o NTT is to present seminars describing to foreign firms NTT's semiconductor certification procedures.
- -- U.S. semiconductor firms have been pleased with progress to date under the November 1983 Recommendations.
- -- On our part, we will continue to press for full implementation of these measures.
- -- We intend to use the High Tech Work Group for similar solutions to trade problems in other high technology sectors.

. Wang ID. 292

Prepared by: H.Kravalis Office of Japan 377-5722 February 21, 1984

# STATES WASHINGTON, D.C. 20230

INTERNATIONAL TRADE ADMINISTRATION

CONTACT: Daniel Landa, (202) 377-2253

ITA 84-5

FOR IMMEDIATE RELEASE

PROPOSED RULES FOR DISTRIBUTION LICENSE PROGRAM

The Commerce Department announced today that it is proposing new rules to tighten its program of distribution licensing of U.S. exports.

A distribution license authorizes exporters to make multiple shipments over an extended period under a single license. This eliminates the need to obtain an individual, validated license for each shipment.

The proposal, the department explained, is the result of a year-long review of the distribution license system and is part of a continuing review of export administration procedures, particularly those which control shipments of high-technology qoods.

Currently, there are about 700 distribution license holders, many of whom are among the largest U.S. exporters. Without the multiple licenses, the department estimates, it would have to issue about a million individual licenses yearly, compared to the current total of 90,000.

Proposed tightening of the rules involves excluding certain high-technology items such as semiconductor devices and production equipment, lasers, and electron beam recorders; restricting use of the blanket licenses to firms with proven export compliance records; and requiring lists of expected end-users, more specific descriptions of exported goods, and tighter controls on reexporting overseas.

(A statement by Acting Assistant Secretary for Trade Administration William T. Archey, and a description of the proposed new rules are attached.)

# # #

"These new regulations are a result of a one-year analysis by Commerce staff. We believe the proposed regulations together with the initiation of a program for audits of distribution license activity both in the U.S. and abroad, and a major augmentation of our staff will significantly limit the potential for abuse of this program. The proposed regulations are intended to strike a balance between an effective export control mechanism and export facilitation.

"These proposed regulations will not eliminate the distribution license program. We presently have 700 distribution license holders, many of whom are among the largest U.S. exporters. The distribution license program probably absorbs an estimated million individual transactions which otherwise would require individual validated export licenses rather than the 90,000 licenses which we processed this past year. Our intent is to improve the program under procedures that can assure us that the distribution license program cannot be a vehicle by which controlled commodities can be diverted to potential adversaries.

"The department will continue to analyze individual licenses and special license procedures as part of a general review of the export control process. The department's regulations are being issued in proposed form. We recognize the importance of the distribution license to the export community and if industry can suggest refinements to our proposals that give us the degree of control we deem essential while avoiding some unintended disruption of normal trade practices, we will consider them before the rules become final."

# # #

(more)

The major proposed amendments to the distribution license, the current provisions, and the rationale for the revisions follow:

- 1. A number of commodities including certain semiconductor material processing equipment, lasers and laser systems, semiconductor devices, and electron beam recorders considered to be high diversion risks will be excluded from this special licensing procedure. Currently, exports of these products are denied only administratively to certain license holders for certain destinations. For national security reasons, these products now will be eliminated from distribution licenses except for NATO countries (excluding Spain), Australia, New Zealand and Japan.
- 2. For distribution license consideration, an exporter must have obtained no fewer than 50 individual validated export licenses in the year prior to applying for the license to countries that the firm will be exporting to under its license. Currently, firms must have a reasonable expectation the distribution license will replace 25 individual validated licenses. The Department believes that this special process, which requires a degree of self policing and sound understanding of the limitations of their license and the regulations, should be restricted to firms with substantial export experience and a proven record of compliance with the regulations.
- 3. Foreign consignees (approved recipients of exports from the U.S. distribution license holder) located outside NATO countries (excluding Spain), Australia, New Zealand or Japan must list the names and addresses of customers to whom they expect to sell products they receive pursuant to the distribution license. Quarterly updates of new customers must be supplied to the Commerce Department. Although all foreign consignees receive copies of the export denial list published by the Department, the new requirement will provide further assurances that potential diverters will not receive products under distribution licenses.
- 4. No commodity received by a foreign consignee under a distribution license may be resold or reexported to a customer located outside a NATO country (excluding Spain), Australia, New Zealand or Japan until the consignee has obtained a certification from its customer that the commodities obtained under the distribution license will not be reexported without Department approval. This new requirement ensures that second tier recipients of products are aware of the reexport restrictions on products exported under distribution licenses. The requirement will limit inadvertent violations and has export enforcement value in the pursuit of willful foreign violations of the reexport restrictions.

- 5. The application for the distribution license must include more specific information on commodities proposed for export under distribution license, including a general description of the commodity, the applicable Export Control Commodity Number (CCL), and an appropriate detailed (sub-paragraph) description. Only broad commodity descriptions are now required which complicates and delays the technical evaluation of applications. Specific descriptions will also simplify enforcement investigations and Office of Export Administration's audit of exports under distribution licenses.
- 6. Foreign consignees will be prohibited from taking undue advantage of the reexport provisions of the Export Administration Regulations which permit certain reexports without written authorization of the Department. This will give DOC greater control over reexports of potentially sensitive products that can be exported from the U.S. under general license in special circumstances, such as the low value of the individual shipment. Currently, unknown foreign end-users or customers could receive multiple shipments under this provision that, in the aggregate, could create national security concerns.
- 7. The "drop shipment" procedure is being modified to restrict the ability of certain overseas firms and individuals from receiving products under a distribution license.

# # #

List of Subjects in 14 CFR Part 71,

Control zones, Transition areas Aviation safety.

#### The Proposed Amendment

Accordingly, pursuant to the authority delegated to me, the FAA proposes to amend § 71.181 of Part 71 of the Federal Aviation Regulations (14 OFR Part 71) as follows:

#### Carlisle, AR New

That airspace extending upwards from 700 feet above the surface within a 8.5-mile radius of the Carlisle Municipal Airport (latitute 34\*48'30"N... longitude 94\*42'45"W.) (Sec. 307(a), Federal Aviation Act of 1958 (49 U.S.C. 1348(a)); Sec. 8(4), 49 U.S.C. 108(g) (Revised, Pub. L. 97-449 January 12, 1963); and 14 CFR 11.61(c).)

Nots.—The FAA has determined that this regulation only involve arrestablished body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. It, therefore—(1) is not a "major rule" under Executive Order 12291; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 1034; February 28, 1979); and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. Since this is a routine patter that will only affect air traffic procedures and air navigation, it is certified that this rule, when promutated, will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

lasted in Fort Worth, TX, on January 0

#### F. Whitfield,

Adding Director, Southwest Region.
[FL Doc. 84-1405 Piled 1-18-84; 8:45 am]

LLING CODE 4010-13-M

#### **DEPARTMENT OF COMMERCE**

International Trade Administration

15 CFR Parts 373 and 376

[Docket No. 40110-04]

Amendments to Distribution License Procedure

AGENCY: Office of Export Administration, International Trade Administration, Commerce.

**ACTION:** Proposed rule with request for comments.

SUMMARY: The Office of Export Administration (OEA) proposes to amend the "Distribution License" procedure, an authorization to export certain commodities under an international marketing program to consignees that have been approved in advance as foreign distributors or users. OEA has determined that these regulatory changes, as well as the institution of an extensive program of audits of Distribution License holders and consignees, will better assure this licensing procedure does not result in illegal diversion contrary to U.S. national security. This rule would require submission of a more complete description of the commodities to be exported under a Distribution License. This rule also would ensure that exporters applying for a Distribution License has sufficient experience with basic licensing procedures and sufficient oveseas business to comply fully with the Distribution License procedure. Before these proposed changes are published in final form, OEA will determine which will apply to existing Distribution Licenses and which will apply only to new applications or license renewals.

OEA is reviewing some items on the Commodity Control List (Supplement No. 1 to § 399.1 of the Regulations) for possible exclusion from the Distribution License procedure. This rule proposes to exclude some such items for all destinations except those included in Supplement No. 2 to Part 373 of the Regulations.

The proposed rule modifies the provisions dealing with direct shipments to customers of approved consignees by limiting such shipments to the country in which the consignee is located. This rule also proposes to eliminate the provision that allows approved distributors to make shipments under the permissive reexport provisions of § 374.2 of the Regulations.

The public is invited to make specific comments on each proposed change, and to specify and substantiate anticipated workload impact and economic impact for each proposed change. Comments should specify no only the impact if the proposed changes are applied retroactively to all existing Distribution Licenses, but also the impact if the proposed changes are applied only to new license applications and to license extensions and renewals.

DATE: Comments must be received by February 21, 1984.

ADDRESS: Written comments (six copies when possible) should be sent to:
Procedures Branch, Office of Export
Administration, U.S. Department of

Commerce, P.O. Box 273, Washington, D.C. 20044. Mark "COMMENTS" on the face of the envelope.

FOR FURTHER INFORMATION CONTACT: Vincent Greenwald, Office of Export Administration (Telephone: (202) 377–3856).

SUPPLEMENTARY INFORMATION: The period for submiss on of comments will close Febraury 21, 1984. All comments received before the close of the comment period will be considered by the Department in the Development of final regulations. While comments received after the end of the comment period will be considered if possible, their consideration cannot be assured. Public comments will become a matter of public record. Comments that are accompanied by a request that the information be treated confidentially because of its business proprietary nature or for any other reason will be accepted on the conditions described below.

Public comments on these regulations will be a matter of public record and will be available for public inspection and copying. In the interest of accuracy and completeness, comments in written form are preferred. If oral comments are received, they must be followed by written memoranda, which will also be a matter of public record and will be available for public review and copying. Communications from agencies of the United States Government or foreign governments will not be made available for public inspection.

The public record concerning these regulations will be maintained in the International Trade Administration Freedom of Information Records Inspection Facility, Room 4001-B, U.S. Department of Commerce, 14th Street and Pennsylvania Avenue, N.W., Washington, D.C. 20230. Records in this facility, including written public comments and memoranda summarizing the substance of oral communications, may be inspected and copied in accordance with regulations published in Part 4 of Title 15 of the Code of Federal Regulations. Information about the inspection and copying of records at the facility may be obtained from Patricia L. Mann, the International Trade Administration Freedom of Information Officer, at the above address or by calling (201) 377-3031.

The Office of Export Administration (OEA) is especially interested in receiving comments on the business and economic effects of the proposed regulations. Because providing such comments may involve the disclosure of proprietary business information, OEA

\*\*

will accept comments on a confidential basis.

Persons may request confidential atment for their comments involving oprietary information on paperwork ourden, lost sales, or any other aspects of the business or economic impact of the proposed regulations. The request must include a full statement of the reasons why confidential treatment should be granted. The business or financial information for which confidential treatment is requested should be submitted to OEA on sheets of paper separate from any nonconfidential information submitted. The top of each page should be marked with the term "Confidential Business Information." OEA will either accept the submission in confidence or, if the submission fails to meet the standards for confidential treatment, will return it.

A nonconfidential summary must accompany each submission of confidential information. The summary will be made available for public inspection.

Information accepted by OEA as privileged under section 12(c) of the Export Administration Act and subsections (b) (3) or (4) of the Freedom of Information Act (5 U.S.C. 552(b) (3) and (4)) will be kept confidential and ill not be available for public spection, except according to law.

This rule proposes to establish a requirement that a foreign consignee submit a listing of countries in which U.S.-origin commodities received under the Distribution License will be sold (including names and addresses of customers); the listing will be updated quarterly. The Office of Export Administra ion has submitted this proposal to the Office of Management and Budget OMB) for review under Section 350 (h) of the Paperwork Reduction Act of 1980. The public is invited to so bmit comments on this proposed reporting requirement to the Office of Information and Regulatory Affairs of OMB, New Executive Office Building, Washington, D.C. 20503, Attention: I esk Officer of International Trade Administration.

List of Subjects in 15 CFR Parts 373 and 376

Exports.

Accordingly, the Office of Export Administration proposes to amend the Export Administration Regulations (15 FR Parts 368–399) as follows:

#### PART 373-[AMENDED]

#### § 373.1 [Amended]

1. Section 373.1 is amended by adding the following sentence to the end of the first (undesignated) paragraph—

\*\* \* Improper use or failure to comply with the conditions of any special licensing procedure described in this Part 373 may, in addition to any enforcement action, result in the loss of export privileges under that licensing procedure."

2. In § 373.3, that par of paragraph (c)(1)(ii) that appears before (a), paragraphs (c)(1)(iii), (c)(2), and (d)(3)(ii) (D) and (G) are revised and pargraphs (c) (4) and (5), and (d)(?)(iii) (A) and (B) are added, reading as follows:

#### § 373.3 Distribution lice: se.

- (c) Eligible exporters and consignees.
  (1) \* \* \*
- (ii) An agent, representative, or any other person or firm distributing the commodities to be exported under this license pursuant to a written agreement, either with the U.S. exporter or its wholly-owned subsidiary, that has been in effect for at least one year and that—
- (iii) An end-user importing the commodities for his own use or for use in the production or manufacture of commodities, who has been importing from the U.S. exporter for at least one year.
- (2) Prerequisite experience and volume of business. In order to be considered for a Distribution License, a new applicant must have received approval from OEA for at least fifty individual validated export licenses during the 12 months before applying for a Distribution License. These fifty individual validated licenses must have covered exports to countries that will be receiving U.S. exports under the Distribution License (see § 373.3(a)(1)).
- (4) Unless a distributor meets the qualifications for reexports contained in § 373.3(i), no commodities received by an approved consignee under a Distribution License may be reexported without specific prior written approval from OEA. The written approval may be included on the validated Distribution License, a validated form ITA-6052, or a validated form ITA-699P. In addition, no commodity received by an approved consignee under this License may be resold or reexported to any person located in any country not listed in Supplement No. 2 to Part 373, until the

consignee has obtained the following certification from the purchaser:

We (purchasers) understand that the commodities obtained from (name of distributor) were authorized for expert by the U.S. Government under a special Distribution Licensing procedure on the condition that such commodities would not be reexported without specific prior written approval of the U.S. Government. Accordingly, we acknowledge that the commodities obtained under (order No., contract No., etc.) will not be reexported from (name of country) without such approval.

Such certifications must be retained by the approved consignee for a period of two years after the sales transaction. Consignee may be required to submit such certifications for inspection or audit by OEA. When a continual business relationship is anticipated, the certification may be modified to apply to all transactions, may be valid through the normal validity and extension period of the license, and shall be retained for two years beyond that period.

(5) Notification of special restrictions. It is the responsibility of the exporter to notify all consignees of any special conditions or restrictions applicable to goods received under a Distribution License.

- (d) \* \* \*
- (3) • •
- (ii) \* \* \*

(D) List separately on the application. or on an attachment, a general description of each type of commodity to be exported, the appropriate Export Control Commodity Number from the Commodity Control List (CCL) (Supplement No. 1 to § 399.1) for each, and the appropriate paragraph designation—(a), (a)(1), (a)(1)(i), etc. under the Export Control Commodity Number. Only commodities included in a CCL entry specifically listed on the application and approved by OEA may be exported under a Distribution License. (The listing of the CCL entries by Export Control Commodity Number and aragraph designation will generally constitute a sufficient description of the commodities being shipped. However, the exporter is encouraged to include as specific a description as possible in order to speed up the processing of the application.) OEA may impose more specific limits on the commodities covered by the license.

(G) Leave blank item 9(a), "Quantity," the processing code under item 8'7, and item 9(d), "Unit Price" and "Total Price."

fiii) • • •

(A) Listing of customers. With each form ITA-6052, attach a listing of the countries in which the foreign consignee wishes to sell U.S.-origin commodities received under the Distribution License. This listing shall include the country in which the foreign consignee is located and the countries in the consignee's authorized sales territory, giving for each such country the names and addresses of every customer to which the distributor expects to sell. (Changes to this listing shall be submitted quarterly.) This listing is not required for customers located in countries listed in Supplement No. 2 to Part 373, nor is it required of end-users as described in § 373.3(c)(1)(iii).

(B) Certification of sales territory. The ultimate consignee(s) listed in item 7 of the license application (or on the attached sheet) must submit written certification on the Form ITA-6052, or on a separate attachment, of (1) at least 6 sales during the previous year within each country in the assigned sales territory, or (2) an average of 6 sales per year over the preceding 3 years within each country in that territory. Each time that a particular Distribution License is extended, the consignee must submit a written statement certifying the continued authenticity of the assigned sales territory and evidence that sufficient sales are anticipated in that territory to justify the extension of a Distribution License authorization.

3. Paragraph (e) of § 373.3 is amended by redesignating paragraphs (1). (2) and (3) as (2). (3) and (4) respectively, and by adding a new (e)(1); paragraph (f) is amended by adding a sentence to the end of (f)(1), changing the final period in (f)(2)(ii) to a semicolon and adding the word "and", and adding paragraphs (f)(2) (iii) and (iv), reading as follows:

#### § 373.3 Distribution license.

(e) Action on license applications. (1) Pre-approval review. The Distribution License procedure authorizes multiple export transactions without a review and approval of each individual transaction by OEA. Thus, before approving such a License. OEA must be fully satisfied that the persons benefiting from this special licensing procedure can be relied upon to adhere to the conditions of the license and the Regulations, and that the approval of the application will not be detrimental to U.S. interests. To permit OEA to make such judgments, each application will be reviewed by OEA and OEE to establish the reliability of the parties to the license. Such review may entail an audit

of past export transactions, inspection of documents, and interviews in the United States and abroad. If OEA cannot verify the appropriateness of this special licensing procedure or establish the reliability of the proposed parties to the license, it may deny the application or modify it by eliminating persons from the application or by removing certain commodities or countries included in the application. However, failure to obtain approval to participate in this special licensing procedure does not preclude the filing of an application for an individual validated license or reexport authorization.

(f) Action on Form ITA-6052. (1) Validation. \* \* \* OEA will advise the exporter if any customers on the attached list (see § 373.3(d)(3)(iii)(A)) are not acceptable recipients of U.S.-origin commodities.

(2) \* \* \*

(iii) Advise the consignee that he may not resell or reexport any commodities received under the Distribution License in countries not listed in Supplement No. 2 to Part 373 until the purchaser has furnished the certification required by § 373.3(c)(4); and

- (iv) Advise the consignee of any customers listed on the attachment to Form ITA-6052 that have been found unacceptable by OEA. This notification should advise the consignee to submit to OEA quarterly lists of any changes in customers, and also make clear that the consignee does not need to report and await OEA approval before making sales to new customers. Customers may be added at any time, as long as they are listed in the next quarterly submission, and sales to listed customers may continue unless the distributor is specifically notified that a customer is unacceptable. . . .
- 4. Paragraph (i)(4) of § 373.3 is removed, and paragraph (j) is amended by removing the phrase "or to a customer in another country who has been authorized to receive reexports under the provisions of § 373.3(i)" in the first sentence, and by adding a last sentence reading as follows: "in addition, if the shipment is to a country of destination not listed in Supplement No. 2 to Part 373, the certification described in § 373.3.(c)(4) must be obtained by the consignee before the shipment of the commodities."
- 5. Paragraph (k)(1) of § 373.3 is amended by inserting the following sentence at the beginning of the undesignated flush paragraph following the indented certification:

"In addition, the exporter shall submit a certification of sales territory (see paragraph (d)(3)(iii)(B) of this section)."

- 6. Paragraph (k)(1) of § 373.3 is amended by inserting a new next-to-last sentence to paragraph (iii), reading as follows:
- "\* \* \* In addition, before an exter con can be granted, the ultimate consigner must submit the certification required by paragraph (d)(3)(iii)(B) of this section
- \*7. Paragraph (l) of § 373.3 is amen ed by adding a paragraph (4)(i), readin, as follows:

#### § 373.3 Distribution license.

- (l) Records
- (4) Inspection of records.
- (i) The records of both U.S. exporters and approved consignees will be audited by OEA at regular intervals. As part of the audit procedure, a consignee may be required on occasion to submit to OEA a listing of all sales under this License during the previous month.
- The following entries are added/ revised in Supplement No. 1 to Part 373, "Commodities Excluded from Certain Special License Procedures," each with a footnote reading "Distribution License is available for shipment to countries listed in Supplement No. 2 to Part 373.": Entry 1355 is added between 3336 and 1357; entry 1522 is revised, and an entry 1529 is added immediately following it: entry 1564 is added (following 1555), and an additional entry 1565 is added following the present two entries numbered 1565; and entries 1572 and 1584 are added between 1570 and 1585, reading as follows:

#### § 373.3 Distribution license.

Supplement No. 1—Commodities Excluded from Certain Special License Procedures

1355 sub-entries (b)(1)(ii), (iii), (v) and (x), (b)(2), and (b)(6)(ii) only.

Semiconductor material processing equipment; crystal pullers that are rechargeable without opening, or that are magnetic, or that are computer controlled; molecular beam epitaxial growth equipment; electron beam systems; all masks and maskmaking equipment, except:

Hard surface coated substrates defined in paragraph (b)(2)(ii);

Photo-optical mask fabrication equipment defined in paragraph (b)(2)(v) that does not exceed the performance capabilities of U.S.designed photolithographic step and repeat cameras and pattern generator systems introduced in volume into the market before December 31, 1976;

Manual types of mask inspection equipment defined in paragraph (b)(2)(vi); oto-optical Contact and Proximity mask and expose equipment defined in

graph (b)(2)(vii), and projection aligners mat can produce useful pattern sizes no finer than 3 micrometers; and

Contact image transfer equipment defined in paragraph (b)(2)(x).

Microcircuit and micro ircuit assemblies test equipment defined in p ragraph (b)(6)(ii), except:

Analog test equipment for TV, OP amps and voltage regulators. A/D and D/A circuit test equipment; and

Digital test equipment with test data rates of 10 MHz or less defined in paragraph (b)(6)(ii).

1522 Lasers and laser systems and specially designed con conents and parts therefor, as follows: m. chine tools containing or which are designed o contain lasers described on the Commodity Control List under entry 1522A, single aperture lasers with an output greater than one thousand joules per nanosecond, and tunable diode iasers.

1529 Cesium frequency standards. Instruments designed for use at frequencies greater than 28 GHz, and capable of being controlled by an external signal. FFT signal analyzers with "zoom" capabilities having a resolution better than .02 Hz.

364 Semiconductor devices that have a -speed processing capability with a actional throughout rate of greater than > × 10<sup>11</sup> gate-Hz/cm³. 1565 \* \* \*

1565 \* \* \*

1565 Home personal and small business computers having an XPDR greater than 30 Mbps: specialized processing units that have an "equivalent multiply rate" in excess of 2 million (product) operations per second. (See § 376.10(a)(4)(xxiv) for the definition of 'equivalent multiply rate.'')

1572 All electron beam recorders Analog recorders with the following characteristics:

Bandwidth greater than 2 MHz for longitudinal machines and video machines modified for transient free recording.

Specifically desinged for underwater use. Tape speed greater than 120 ips, consistent with limits imposed on bandwidth.

Having 28 recording channels,

A time basis error better than ± .2 microseconds, consistent with limits imposed on bandwidth.

High density digital recorders having a density of 16K flux reversals per inch or greater (one flux reversal = 1 bit).

1584 Cathode ray oscilloscopes having amplifier bandwidths greater than 350 MHz.

Oscilloscopes hving cathode-ray tubes incorporating microchannel plate electron multipliers capable of operating at requencies greater than 1000 MHz.

ligital oscilloscopes with sequential ipling of the input signal at an interval of as than 2 nanoseconds.

#### PART 376-[AMENDED]

9. Section 376.10 is amended by adding paragraphs (a)(4) (xxv) and (xxvi), reading as follows:

#### § 378.10 Electronic computers and related equipment.

(a) Digital computers.

(4) Definitions of terms.

(xxv) "Equivalent multiply rate" is defined as the greater number of multiplication operations that can be performed per second, neglecting setup or pipeline filling operations. This rate is based on the maximum rate achievable fully utilizing all hardware architectural features (including multiple or staged (pipelined) arithmetic units); assuming optimal operand lengths of 16 bits or greater and optimal operand locations in the "most immediate memory"; and ignoring initialization, interrupts, and data reordering times:

(a) If the basic multiplication operation includes multiple simultaneous multiplications either because of complicated computational arithmetic operations (complex multiplication, convolution, recursive filtering) or parallel pipelining, the "equivalent multiply rate" is the basic multiply rate times the number of multiplies that can be performed simultaneously;

(b) If multiple arithmetic units are used within a single processing unit, the "equivalent multiply rate" is the "equivalent multiply rate" of one unit multiplied by the number of units;

(c) If multiple processing units of the same or different types (e.g., array processor, image enhancement processor) are contained in a system, the "equivalent multiply rate" is the sum of the "equivalent multiply rates" of each of the processing units.

(xxvi) "Most immediate memory" is defined as the portion of "main memory" most directly accessible by the central processing unit:

(a) For single level "main memories." the "most immediate memory" is the internal memory;

(b) For hierarchical "main memories." the "most immediate memory" is

The cache memory.

(2) The instruction stack, or

(3) The data stack.

(Secs. 4, 5, 13 and 15, Pub. L. 96-72, 93 Stat. 503 as amended, 50 U.S.C. app. 2401 et seq. Executive Order No. 12214 (45 FR 29783, May 6. 1980); Executive Order No. 12451 of December 20, 1963 (48 FR 56563, December 22, 1983)

Dated: January 16, 1984.

John K. Boldock.

Director, Office of Export Administration, International Trade Administration.

[FR Doc. 84-1537 Filed 1-18-84; 8:45 am] BILLING CODE 3610-DT-M

#### DEPARTMENT OF THE INTERIOR

Bureau of Indian Affairs 25 CFR Part 20

Financial Assistance and Social Services Program

January 13, 1984.

AGENCY Bureau of Indian Affair Interior.

ACTION: Proposed rule, correction and extension of comment period.

SUMMARY: The Bureau of Indian Affairs is correcting an inadvertent error in a proposed rule which was published on Wednesday, January 11, 1984 (FR Doc. 84–647) on page 49 FR 1381 relating to the financial assistance and of the services program. Because of the correction the comment period is extended.

DATES: Comments must be received on or before February 21 1984.

ADDRESS: Written comments should be addressed to: Chief, Division of Social Services, Bureau of Addian Affairs, 1951 Constitution Avenye. N.W., Washington, D.C. 20245.

SUPPLEMENTARY AFORMATION: The Bureau of Indian Affair is correcting a proposed rule which was published in the Federal Register on Wednesday. January 11, 1961 (FR Doc. 84-847) on page 1381 by removing the following language under the third paragraph of the Supplementary Information portion of the Preamble: "However, lince the general assistance program is federally funded, the Bureau, to avoid placing excessive hardship on recipients, is proposing a 'floor' or minimum payment level of not less than one-third of the national poverty levels as established annually by the Department of Commerce. Also," The following phrase is also removed from § 20.1(s): "except that no payment level shall be less than one-third of the national annual poverty leve as published by the U.S. Department of Commerce."

John W. Fritz,

Deputy Assistant Secretary, Indian Affairs berations).

Doc. 84-1233 Piled 1-18-84; 8:45 am MIG CODE 4316-02-18

### RESEARCH AND DEVELOPMENT LIMITED PARTNERSHIP (RDLP) ACTIVITY IN THE SEMICONDUCTOR INDUSTRY

#### Background Paper

#### ISSUE:

RDLP activity in the semiconductor and related industries.

#### BACKGROUND:

RDLPs are being used extensively to fund developments in technologies directly related to the semiconductor industry. While we have no complete listing of all RDLPs formed by the private sector the attached listing of 1981, 1982 and 1983 RDLP Activity and Case Studies is illustrative. RDLPs were originally limited primarily to the single company model. More elaborate arrangements are now in use.

As noted in the Case Studies, the Semiconductor Resarch Corporation (SRC), a subsidiary of the Semiconductor Industry Association, is working on a plan to fund the development of a multi-megabit dynamic random access memory chip. This will be a significant innovation over existing technology and will involve a large group of semiconductor and computer manufacturers. A RDLP is being considered among the various methods of funding this estimated \$100 million project. SRC is also investigating the possibility of Federal government participation in the program.

Attachments

## RESEARCH AND DEVELOPMENT LIMITED PARTNERSHIPS PARTIAL LISTING\* OF 1981-1983 ACTIVITY

#### Contents

1983	19	RDLPs	totalling	\$457,148,000			•	•	•			-	Pages	2-3
1982	68	RDLPs	totalling	\$602,879,142	•	•	•	•	•	•	•	•	Pages	4-7
1981	16	RDLPs	totalling	\$225,883,000	•	•		•	•	•	•	•	Page	8

Industrial Technology Partnerships Program
Office of Productivity, Technology and Innovation
U.S. Department of Commerce
Washington, D.C. 20230
(202) 377-1094

\*To our knowledge there is no complete listing of RDLPs available. This list is therefore illustrative.

January 1984

NAME	TECHNOLOGY/PRODUCT	OFFERING
Alza TTS Res.	Transdermal Drug Delivery Systems	\$16,000,000
Genentech Clinical II	TPA Development	32,000,000
Cetus Healthcare	Biotechnology	75,000,000
PRC Technology Partners (E. F. Hutton)	Electronics	25,000,000
Orbital Sciences Corp.	Aeronautics	50,000,000
Advanced Electronic Ballast, Ltd.	Electronics	1,225,000
CAD Software Partnership	Computer Software	1,220,000
Realty One, Ltd.	Computer Software	453,000
Insurance Planning Software Ltd.	Computer Software	350,000
Opticon Res. Associates Ltd.	Diagnostic Instruments	1,100,000
Jumbo Barge Technology	Cargo Ship Building	300,000
Helicopter Weaponry Systems. Ltd.	Weapon Systems	1,500,000
Cummins Research Limited Partnership	Diesel Engines	21,000,000
PruTech Research and Development Partn.	Miscellaneous	100,000,000
Control Data/Univ. of Pittsburgh		100,000,000
Maritime Research Group IV Ltd.	Marine Electronics	23,000,00
Renewable Resource Partners I	Renewable Energy	10,000,000
·	SUBTOTAL	\$456,148,000

### 1983 (cont.)

NAME	TECHNOLOGY/PRODUCT	OFFERING		
Software Development Venture	Computer Software	500,000		
Timesharing Development Venture	Computer Timesharing Software	\$ 500,000		
	SUBTOTAL	\$ 1,000,000		

Page 2 \$456,148,000 Page 3 1,000,000

Total for 1983 \$457,148,000

1	9	8	2

	· ·	
NAME	TECHNOLOGY/PRODUCT	OFFERINGS
Ventrex Technology	Medical Diagnostic Instruments	\$15,000,000
Control Data Research	Computer	30,000,000
Diversified Technology	Phone-switching system, laser read videodiscs	18,598,000
Syntex Diagnostic	Diagnostic Instruments	23,500,000
Genentech Clinical	human clinical testing	55,000,000
Biotechnology Res.	Pharmaceutical	25,000,000
Structural Integrity Systems, Ltd.	Aircraft Preventive Maintenance	7,875,000
Excelsus Ltd. Partnership	Biotechnology	1,575,000
Linear Pump Development,	Tubular linear Motor	5,985,000
Sona-Tool Development, Ltd.	Piezoelectric Transducer Array	10,500,000
Daleco R&D Partners	Miscellaneous	5,050,000
Matheus Development	Electronics	1,775,000
Genetic Systems Respiratory Partners	Biotechnology	3,800,000
The Software Fund	Computer Software	5,050,000
Sherwood R&D Partnership	Polyurethane sponge technology	425,000
Cambridge Research Partners	Miscellaneous	3,300,000
KLA Development No. 2, Ltd.	Electro-optical Products	3,380,000
University of CT Health Center	Diagnostic Medicine	2,500,000
Spectrum Development Ltd., Partnership	Computer Software	1,500,000

SUBTOTAL

\$219,813,000

1	9	8	2	(	C	0	n	t	•	)

NAME	TECHNOLOGY/PRODUCT	OFFERING
LIXI Res., Ltd. Partnership	Electronics	\$ 1,140,000
Primary Computer Partners	Computer Software	1,200,000
Solar Pilot Ltd.	Electronics	1,625,000
Sernono Pharamaceutical	Pharmaceutical	28,160,000
Molecular Genetics	Biotechnology	20,000,000
Maritime Research	Marine	15,000,000
Techno-Kinetic Assoc.		5,000,000
Herpes Research	Biotechnology	4,605,100
Factory of the Future	Computer	4,400,000
Interactive Cable	Electronics	4,166,667
Quad II Digital	Electronics	3,500,000
Machine Monitoring	Electronics	3,000,000
Meditech - '82	Biotechnology	2,500,000
Ferrofluidics Assoc.	Computer	2,020,000
Technology Investors		1,500,000
Digital Recording	Electronics	1,250,000
University Computer	Computer	1,225,000
ZBX Associates	•	1,100,000
Medical Interfaces	Medical	800,000
Information Technology	•	650,000
Jones Futural Fund I		497,000
Automotive Technology	Auto	480,000
Hotel Account, Assoc.		165,000
	SUBTOTAL	\$103,983,767

### 1982 (cont.)

NAME	TECHNOLOGY	(	OFFERING
Bay Partners II	High Tech	\$	19,000,000
BFUC R&D Partnership	Microcomputer		1,300,000
Controlled Genetics	Embryo Transplants		1,000,000
Crosspoint Venture Partners	Miscellaneous	•	1,500,000
Dillon Oil Technology Partners-1982	Oil Technology		18,750,000
Electronic Fish Exploration Systems	Marine Electronics	•	1,500,000
Energy Sciences LP 1982-I	Electronics-Cable TV		11,025,000
Flourescent Chemistries, Ltd.	Medical Diagnostics		60,000,000
Flow Industries Partnership	Wind Energy Equipment		800,000
High Tech Venture Capital Fund	Bridge Financing		1,000,000
HTS Partners, Ltd	Computer Software		1,750,000
LFC Technology Partners	Liquid fuel from Coal		17,421,000
McPherson Aircraft	Aircraft		2,000,000
Medical Development, Ltd.	Medical Equipment		500,000
ML Venture Partners I	Miscellaneous		60,000,000
P.U.F. Research and Development	Portable Utility Box		
Primarius R&D	Microprocessor		1,500,000
	SUBTOTAL	<b>\$</b> _	199,046,000

### 1982 (cont.

NAME	TECHNOLOGY	OFFERING
Qualex Partners	Cache Tape Streamer	12,000,000
Red Carpet Systems R&D	Computer	5,500,000
Standard Havens Research Associates	Coal/Water Alternative Fuel	2,536,375
Star Garden Enterprises	Computers	1,500,000
Technology Investors Ltd.	Computers	1,500,000
TRI Fund Limited Partnership	Tertiary Oil and Gas Recovery	50,000,000
U.S. Ferto Corp. Phase III	Fertilizer	1,000,000
W.D. Limited B	Telecommunications	2,000,000
STC Ultimacc Associates L.P.	Software Design	4,000,000
••	SUBTOTAL	\$ 80,036,375

Page 4	\$219,813,000
Page 5	103,983,767
Page 6	199,046,000
Page 7	80,036,375
Total for 199	2 \$602 979 142

1	9	8	1

NAME	TECHNOLOGY/PRODUCT	OFFERING
Kenetic Partners Group, Ltd.	Microcomputer	\$ 1,500,000
Computer Magnetics R&D Partnership	Floppy Disk	6,525,000
Detonics Small Arms Ltd. Partnership	Small Arms	4,250,000
Princess Heart Watch	Pulse Monitor	1,500,000
University R&D	3-D Mimical Stage System (Animated)	1,158,000
Bio-Medical Research Partners	Automated immunoassy system	2,500,000
Athena Technologies	Electronic Water Analysis	3,200,000
Fluid Abrasives	Fluid Abrasives	500,000
Quad II Digital Radiography	Digital Radiographic System	3,500,000
Bio-Vision System	Video Viewing System	1,225,000
Storage Technology Partners I	IBM-compatible Computer	50,000,000
Storage Technology Partners II	Computers	50,000,000
Triology Computer II	IBM-compatible Computer	55,000,000
Agrigenetics Research	Biotechnology	40,000,000
Sherwood R&D Partnership	Polyurethane sponge technology	1,275,000
DNA Ltd. Partnership	Biotechnology	3,750,000
	TOTAL	\$225,883,000

P

STATEMENT OF GERALD J. MOSSINGHOFF
ASSISTANT SECRETARY OF COMMERCE
AND COMMISSIONER OF PATENTS AND TRADEMARKS
BEFORE THE

SUBCOMMITTEE ON COURTS, CIVIL LIBERTIES AND THE ADMINISTRATION OF JUSTICE

OF THE

HOUSE COMMITTEE ON THE JUDICIARY

ON

H.R. 1028
"SEMICONDUCTOR CHIP PROTECTION ACT OF 1983"

December 1, 1983

Mr. Chairman and Members of the Subcommittee:

I welcome this opportunity to testify on the "Semiconductor Chip Protection Act of 1983", H.R. 1028. This bill would amend Title 17 of the United States Code to protect semiconductor chips and masks against unauthorized duplication.

The bill would make available to the semiconductor industry the established procedures and remedies of the copyright law by adding "mask works" as a new category of copyrightable works. It would provide to the owner of the copyright 10 years of exclusive rights to make or distribute the masks, to make chips from the masks or reproduce the mask onto a layer of a chip, and to use or distribute such chips. Innocent good faith purchasers of such chips would be protected and, if they had made a substantial investment, could acquire a compulsory license at a reasonable royalty for continued or future use of the chips.

The semiconductor industry is a vital and rapidly growing part of the U.S. economy. The Bureau of Industrial Economics of the Department of Commerce forecasts that in 1983 the industry will ship more than \$12.6 billion worth of semiconductor and related devices. This amount is sharply up from the estimate for 1982 of \$10.9 billion.

U.S. companies still dominate the field, accounting for 67% of the worldwide semiconductor market. It is projected that in 10 years semiconductors will have sales exceeding \$90 billion and will be the basis for two of the four major industries of the 1990's -- computers and telecommunications.

The intricate patterns or designs of semiconductor chips can be copied and used to produce duplicate chips at a fraction of the large initial research and development costs necessary to create a functioning chip. As the level of complexity of the circuits has grown, so has the cost of creating chip designs embodying those circuits. The research and development costs of a single complex chip is estimated to cost approximately \$4 million. Such a chip could be copied photographically for as little as \$100,000. A relatively simple chip would cost approximately \$425,000 for research and development, and this chip could be duplicated and placed on the market in three to six months with an investment of \$30,000-\$50,000, or approximately one-tenth of the investment of the chip originator.

The net effect of chip copying is to shorten the period during which research and development costs can be recovered. This can only discourage companies from making the large investments necessary for advancing this technology. Instead, it encourages them to engage in chip copying to the detriment of worldwide technological advancement in this important field.

There are no effective legal means of stopping the copying of chips under existing United States laws. Patent protection is available for the process of making the chip, for the electronic circuit embodied in the chip, or for the chip itself as an article of manufacture, provided that the process or the circuit or the article of manufacture meets the patentability requirements of being new, useful and unobvious. While a patent on the circuit would protect against the manufacture, use or sale of the circuit, the circuits in

chips are usually well-known and therefore unpatentable. Patents for the process of making the chip or for the chip itself as an article of manufacture would not ordinarily protect against a taking of the design.

Copyright protection is currently not available for chip designs, principally because the design of the chip is considered utilitarian in nature. The Copyright Office presently refuses to register claims to copyright in the design of semiconductor chips or in the chips themselves.

Trade secret protection is available but only up to the time that the first disclosure or unrestricted sale of the chip is made.

Legislation to protect semiconductor chip designs has been introduced in each of the three previous Congresses. approaches have been suggested to provide the additional protection that is needed. Of these, I believe that the copyright approach is the preferable method for protecting semiconductor chip designs. This approach has several advantages. The system could take advantage of the well-established procedures and remedies of the copyright law. It would provide prompt, inexpensive protection through a registration system without substantive examination. addition, the United States is a party to the Universal Copyright Convention (UCC). If the United States protects semiconductor chip designs by copyright, it would be much easier to persuade other members of the UCC to follow the lead of the United States and establish comparable and compatible protection for semiconductor chip designs. Despite a minority view that the copyright law should be reserved for artistic rather than utilitarian creations, the copyright approach is preferable, in my view.

In testimony before the Senate Subcommittee on Patents, Copyrights and Trademarks, at the May 19 hearing, several witnesses mentioned the desirability of an exception for "reverse engineering". The Senate Subcommittee staff circulated proposed amendments in the form

of a draft Subcommittee print that would provide an option for an express right of reverse engineering for the purpose of teaching, analyzing or evaluating the concepts or techniques embodied in the design of the semiconductor chip. The Senate Subcommittee reported out a bill last month which contains such a reverse engineering provision.

This reverse engineering exception essentially incorporates a desirable feature of the copyright law. Making a limited number of copies for teaching purposes generally constitutes "fair use" under the copyright law.

The Cabinet Council on Commerce and Trade has established a Working Group on Intellectual Property to consider the increasing number of important issues in this field. This Working Group, which I chair, considered H.R. 1028 and its companion bill, S. 1201. On September 14, 1983, the Cabinet Council, on the recommendation of Secretary Baldrige, unanimously endorsed legislation to protect semiconductor chip designs, with the following specific characteristics:

- o It should provide prompt, inexpensive protection for original semiconductor chip designs through a registration system without substantive examination.
- o It should grant to the owner of the chip design the exclusive right to copy, for commercial purposes, the chip design, or chip embodied in that design, as well as the exclusive right to distribute such a chip.
- o The exclusive right should exist for a relatively short term, e.g., ten years;
- o The legislation should provide an express right of reverse engineering for the purpose of teaching, analyzing or evaluating the concepts or techniques embodied in the design of the semiconductor chip.

o Finally, unless there are overriding circumstances to the contrary, the protection should be prospective from the current time frame.

Thus, the Administration strongly supports legislation along the lines of H.R. 1028 (amended to include the "reverse engineering" provision). Such a measure would fill the gap in intellectual property protection which currently exists for an important segment of our economy and would enhance the incentive to create new technology.

Mr. Chairman, that concludes my prepared statement. I would be pleased to answer any questions you or the other members of the Subcommittee may have.

### RESEARCH AND DEVELOPMENT INCENTIVES FOR U.S. INDUSTRY: HOW EFFECTIVE?

#### Background Paper

#### ISSUE:

The Economic Recovery Tax Act of 1981 (ERTA) provided tax credits to U.S. companies for incremental research and development expenditures made between July 1, 1981 and December 31, 1985. This provision of ERTA is currently being considered for extension beyond 1985. At a Cabinet Council on Economic. Affairs meeting on October 11, 1983, a question was asked about the effects of the tax measures of 1981 on the pace of industrial research and development.

#### BACKGROUND:

Information concerning such expenditures since the ERTA tax actions has been collected for the second half of 1981, 1982, and is now being accumulated for 1983. Sources of information include:

- 1. The Annual Survey of Industrial Research and Development conducted by the Census Bureau for the National Science Foundation involving 1600 companies.
- 2. A National Science Foundation survey in the spring of 1983 involving a panel of 100 research directors of American companies accounting for 60 percent of the total industrial R&D expenditures.
- 3. The 1983 McGraw-Hill annual survey included a special section on the effects of ERTA.
- 4. The 10-K company reports submitted to the Securities and Exchange Commission.
- 5. The Business Week Annual Reports Survey.
- 6. Various Internal Revenue Service reports on corporate returns for 1981 through 1983.
- 7. A small survey of members of the American Electronics Association prepared in 1983.
- 8. A large study conducted by Deloitte Haskins and Sells of the members of five trade associations with a tentative February 1984 publication date.
- 9. The Department of Commerce has added a specific question on this topic to its monthly survey of chief executive officers.

10. Various academic studies of the effects of ERTA on R&D spending are currently being prepared (Professor Eisner of Northwestern University and Professor Mansfield of the University of Pennsylvania have recently written on the topic).

#### FINDINGS:

- A. These various reports generally indicate that the effects of the ERTA tax changes on R&D outlays cannot be determined because of the relatively brief time period the new tax credit has been used and the temporary status of the incentive.
  - 1. Preliminary findings, however, indicate that the tangible effects have been modest to date and the industry pattern of response has been uneven. While the general reaction has been positive, the magnitude of actual spending changes and the marginal nature of decisions in response to the tax law adjustments are not clear.
  - 2. A second conclusion is that the temporary status of the 1981 R&D tax credit created considerable skepticism, which has delayed major long-term allocation of company resources to R&D efforts.
- B. The large number of government, trade association, and academic studies on this topic indicate that it is not necessary to initiate another survey.

T

