§ 1.53(d) is shown to have been transmitted to and received in the Office,

(1) Provided that the party who transmitted such application under § 1.53(d):

(i) Informs the Office of the previous transmission of the application under § 1.53(d) promptly after becoming aware that the Office has no evidence of receipt of the application under § 1.53(d);

(ii) Supplies an additional copy of the previously transmitted application under § 1.53(d); and

(iii) Includes a statement which attests on a personal knowledge basis or to the satisfaction of the Commissioner to the previous transmission of the application under § 1.53(d) and is accompanied by a copy of the sending unit's report confirming transmission of the application under § 1.53(d) or evidence that came into being after the complete transmission and within one business day of the complete transmission of the application under § 1.53(d).

(2) The Office may require additional evidence to determine if the application under § 1.53(d) was transmitted to and received in the Office on the date in question.

4. Section 1.8 is amended by revising paragraphs (a)(2)(i)(A) and (b) to read as follows:

**§ 1.8 Certificate of mailing or transmission.**

(a) * * *

(2) * * *

(i) * * *

(A) The filing of a national patent application specification and drawing or other correspondence for the purpose of obtaining an application filing date, including a request for a continued prosecution application under § 1.53(d);

* * * * *

(b) In the event that correspondence is considered timely filed by being mailed or transmitted in accordance with paragraph (a) of this section, but not received in the Patent and Trademark Office, and the application is held to be abandoned or the proceeding is dismissed, terminated, or decided with prejudice, the correspondence will be considered timely if the party who forwarded such correspondence:

(1) Informs the Office of the previous mailing or transmission of the correspondence promptly after becoming aware that the Office has no evidence of receipt of the correspondence;

(2) Supplies an additional copy of the previously mailed or transmitted correspondence and certificate; and

(3) Includes a statement which attests on a personal knowledge basis or to the satisfaction of the Commissioner to the previous timely mailing or transmission. If the correspondence was sent by facsimile transmission, a copy of the sending unit's report confirming transmission may be used to support this statement.

* * * * *

5. Section 1.9 is amended by revising paragraphs (d) and (f) to read as follows:

**§ 1.9 Definitions.**

* * * * *

(d) A small business concern as used in this chapter means any business concern meeting the size standards set forth in 13 CFR Part 121 to be eligible for reduced patent fees. Questions related to size standards for a small business concern may be directed to: Small Business Administration, Size Standards Staff, 409 Third Street, SW, Washington, DC 20416.

* * * * *

(f) A small entity as used in this chapter means an independent inventor, a small business concern, or a non-profit organization eligible for reduced patent fees.

* * * * *

6. Section 1.10 is amended by revising paragraphs (d) and (e) to read as follows:

**§ 1.10 Filing of correspondence by "Express Mail."**

* * * * *

(d) Any person filing correspondence under this section that was received by the Office and delivered by the "Express Mail Post Office to Addressee" service of the USPS, who can show that the "date-in" on the "Express Mail" mailing label or other official notation entered by the USPS was incorrectly entered or omitted by the USPS, may petition the Commissioner to accord the correspondence a filing date as of the date the correspondence is shown to have been deposited with the USPS, provided that:

(1) The petition is filed promptly after the person becomes aware that the Office has accorded, or will accord, a filing date based upon an incorrect entry by the USPS;

(2) The number of the "Express Mail" mailing label was placed on the paper(s) or fee(s) that constitute the correspondence prior to the original mailing by "Express Mail"; and

(3) The petition includes a showing which establishes, to the satisfaction of the Commissioner, that the requested filing date was the date the correspondence was deposited in the "Express Mail Post Office to Addressee" service prior to the last scheduled pickup for that day. Any showing pursuant to this paragraph must be corroborated by evidence from the USPS or that came into being after deposit and within one business day of the deposit of the correspondence in the "Express Mail Post Office to Addressee" service of the USPS.

(e) Any person mailing correspondence addressed as set out in § 1.1(a) to the Office with sufficient postage utilizing the "Express Mail Post Office to Addressee" service of the USPS but not received by the Office, may petition the Commissioner to consider such correspondence filed in the Office on the USPS deposit date, provided that:

(1) The petition is filed promptly after the person becomes aware that the Office has no evidence of receipt of the correspondence;

(2) The number of the "Express Mail" mailing label was placed on the paper(s) or fee(s) that constitute the correspondence prior to the original mailing by "Express Mail";

(3) The petition includes a copy of the originally deposited paper(s) or fee(s) that constitute the correspondence showing the number of the "Express Mail" mailing label thereon, a copy of any returned postcard receipt, a copy of the "Express Mail" mailing label showing the "date-in," a copy of any other official notation by the USPS relied upon to show the date of deposit, and, if the requested filing date is a date other than the "date-in" on the "Express Mail" mailing label or other official notation entered by the USPS, a showing pursuant to paragraph (d)(3) of this section that the requested filing date was the date the correspondence was deposited in the "Express Mail Post Office to Addressee" service prior to the last scheduled pickup for that day; and

(4) The petition includes a statement which establishes, to the satisfaction of the Commissioner, the original deposit of the correspondence and that the copies of the correspondence, the copy of the "Express Mail" mailing label, the copy of any returned postcard receipt, and any official notation entered by the USPS are true copies of the originally mailed correspondence, original "Express Mail" mailing label, returned postcard receipt, and official notation entered by the USPS.

* * * * *

7. Section 1.11 is amended by revising paragraph (b) to read as follows:

**§ 1.11 Files open to the public.**

* * * * *

(b) All reissue applications, all applications in which the Office has accepted a request to open the complete

dismissed, terminated, or decided with prejudice, the correspondence will be considered timely if the party who forwarded such correspondence:

(1) Informs the Office of the previous mailing or transmission of the correspondence promptly after becoming aware that the Office has no evidence of receipt of the correspondence;

(2) Supplies an additional copy of the previously mailed or transmitted correspondence and certificate; and

by the USPS;

(2) The number of the "Express Mail" mailing label was placed on the paper(s) or fee(s) that constitute the correspondence prior to the original mailing by "Express Mail"; and

(3) The petition includes a showing which establishes, to the satisfaction of the Commissioner, that the requested filing date was the date the correspondence was deposited in the "Express Mail Post Office to Addressee" service prior to the last scheduled

"Express Mail" mailing label, returned postcard receipt, and official notation entered by the USPS.

* * * * *

7. Section 1.11 is amended by revising paragraph (b) to read as follows:

**§ 1.11 Files open to the public.**

* * * * *

(b) All reissue applications, all applications in which the Office has accepted a request to open the complete

application to inspection by the public, and related papers in the application file, are open to inspection by the public, and copies may be furnished upon paying the fee therefor. The filing of reissue applications, other than continued prosecution applications under § 1.53(d) of reissue applications, will be announced in the *Official Gazette*. The announcement shall include at least the filing date, reissue application and original patent numbers, title, class and subclass, name of the inventor, name of the owner of record, name of the attorney or agent of record, and examining group to which the reissue application is assigned.

* * * * *

8. Section 1.14 is amended by revising paragraph (a) and adding a new paragraph (f) to read as follows:

**§ 1.14 Patent applications preserved in confidence.**

(a) Patent applications are generally preserved in confidence pursuant to 35 U.S.C. 122. No information will be given concerning the filing, pendency, or subject matter of any application for patent, and no access will be given to, or copies furnished of, any application or papers relating thereto, except as set forth in this section.

(1) Status information includes information such as whether the application is pending, abandoned, or patented, as well as the application number and filing date (or international filing date or date of entry into the national stage).

(i) Status information concerning an application may be supplied:

(A) When copies of, or access to, the application may be provided pursuant to paragraph (a)(3) of this section;

(B) When the application is identified by application number or serial number and filing date in a published patent document or in a U.S. application open to public inspection; or

(C) When the application is the national stage of an international application in which the United States of America has been indicated as a Designated State.

(ii) Status information concerning an application may also be supplied when the application claims the benefit of the filing date of an application for which status information may be provided pursuant to paragraph (a)(1)(i) of this section.

(2) Copies of an application-as-filed may be provided to any person, upon written request accompanied by the fee set forth in § 1.19(b)(1), without notice to the applicant, if the application is incorporated by reference in a U.S. patent.

(3) Copies of (upon payment of the fee set forth in § 1.19(b)(2)), and access to, an application file wrapper and contents may be provided to any person, upon written request, without notice to the applicant, when the application file is available and:

(i) It has been determined by the Commissioner to be necessary for the proper conduct of business before the Office or warranted by other special circumstances;

(ii) The application is open to the public as provided in § 1.11(b);

(iii) Written authority in that application from the applicant, the assignee of the application, or the attorney or agent of record has been granted; or

(iv) The application is abandoned, but not if the application is in the file jacket of a pending application under § 1.53(d), and is:

(A) Referred to in a U.S. patent;

(B) Referred to in a U.S. application open to public inspection;

(C) An application which claims the benefit of the filing date of a U.S. application open to public inspection; or

(D) An application in which the applicant has filed an authorization to lay open the complete application to the public.

* * * * *

(f) Information as to the filing of an application will be published in the *Official Gazette* in accordance with § 1.47(a) and (b).

9. Section 1.16 is amended by revising paragraphs (d) and (l) to read as follows:

**§ 1.16 National application filing fees.**

* * * * *

(d) In addition to the basic filing fee in an original application, except provisional applications, if the application contains, or is amended to contain, a multiple dependent claim(s), per application:

By a small entity (§ 1.9(f)) ..... 135.00
By other than a small entity ..... 270.00

* * * * *

(l) Surcharge for filing the basic filing fee or cover sheet (§ 1.51(c)(1)) on a date later than the filing date of the provisional application:

By a small entity (§ 1.9(f)) ..... 25.00
By other than a small entity ..... 50.00

* * * * *

10. Section 1.17 is amended by removing and reserving paragraphs (e) through (g) and revising paragraphs (a) through (d), (h), (i) and (q) to read as follows:

**§ 1.17 Patent application processing fees.**

(a) Extension fees pursuant to § 1.136(a):

(1) For reply within first month:

By a small entity (§ 1.9(f)) ..... $55.00
By other than a small entity ..... 110.00

(2) For reply within second month:

By a small entity (§ 1.9(f)) ..... 200.00
By other than a small entity ..... 400.00

(3) For reply within third month:

By a small entity (§ 1.9(f)) ..... 475.00
By other than a small entity ..... 950.00

(4) For reply within fourth month:

By a small entity (§ 1.9(f)) ..... 755.00
By other than a small entity ..... 1,510.00

(5) For reply within fifth month:

By a small entity (§ 1.9(f)) ..... 1,030.00
By other than a small entity ..... 2,060.00

(b) For filing a notice of appeal from the examiner to the Board of Patent Appeals and Interferences:

By a small entity (§ 1.9(f)) ..... 155.00
By other than a small entity ..... 310.00

(c) In addition to the fee for filing a notice of appeal, for filing a brief in support of an appeal:

By a small entity (§ 1.9(f)) ..... 155.00
By other than a small entity ..... 310.00

(d) For filing a request for an oral hearing before the Board of Patent Appeals and Interferences in an appeal under 35 U.S.C. 134:

By a small entity (§ 1.9(f)) ..... 135.00
By other than a small entity ..... 270.00

(e) [Reserved]

(f) [Reserved]

(g) [Reserved]

(h) For filing a petition to the Commissioner under a section listed below which refers to this paragraph ..... 130.00

§ 1.182—for decision on a question not specifically provided for.

§ 1.183—to suspend the rules.

§ 1.295—for review of refusal to publish a statutory invention registration.

§ 1.377—for review of decision refusing to accept and record payment of a maintenance fee filed prior to expiration of a patent.

§ 1.378(e)—for reconsideration of decision on petition refusing to accept delayed payment of maintenance fee in an expired patent.

§ 1.644(e)—for petition in an interference.

§ 1.644(f)—for request for reconsideration of a decision on petition in an interference.

§ 1.666(c)—for late filing of interference settlement agreement.

§ 5.12—for expedited handling of a foreign filing license.

§ 5.15—for changing the scope of a license.

§ 5.25—for retroactive license.

(i) For filing a petition to the Commissioner under a section listed below which refers to this paragraph ..... 130.00

§ 1.12—for access to an assignment record.

§ 1.14—for access to an application.

§ 1.41—to supply the name or names of the inventor or inventors after the filing date without an oath or declaration as prescribed by § 1.63, except in provisional applications.

§ 1.47—for filing by other than all the inventors or a person not the inventor.

§ 1.48—for correction of inventorship, except in provisional applications.

§ 1.53—to accord a filing date, except in provisional applications.

§ 1.55—for entry of late priority papers.

application may also be supplied when the application claims the benefit of the filing date of an application for which status information may be provided pursuant to paragraph (a)(1)(i) of this section.

(2) Copies of an application-as-filed may be provided to any person, upon written request accompanied by the fee set forth in § 1.19(b)(1), without notice to the applicant, if the application is incorporated by reference in a U.S. patent.

By other than a small entity ..... 50.00

* * * * *

10. Section 1.17 is amended by removing and reserving paragraphs (e) through (g) and revising paragraphs (a) through (d), (h), (i) and (q) to read as follows:

**§ 1.17 Patent application processing fees.**

(a) Extension fees pursuant to § 1.136(a):

(1) For reply within first month:

By a small entity (§ 1.9(f)) ..... $55.00

§ 1.12—for access to an assignment record.

§ 1.14—for access to an application.

§ 1.41—to supply the name or names of the inventor or inventors after the filing date without an oath or declaration as prescribed by § 1.63, except in provisional applications.

§ 1.47—for filing by other than all the inventors or a person not the inventor.

§ 1.48—for correction of inventorship, except in provisional applications.

§ 1.53—to accord a filing date, except in provisional applications.

§ 1.55—for entry of late priority papers.

§ 1.59—for expungement and return of information.

§ 1.84—for accepting color drawings or photographs.

§ 1.91—for entry of a model or exhibit.

§ 1.97(d)—to consider an information disclosure statement.

§ 1.102—to make an application special.

§ 1.103—to suspend action in application.

§ 1.177—for divisional reissues to issue separately.

§ 1.312—for amendment after payment of issue fee.

§ 1.313—to withdraw an application from issue.

§ 1.314—to defer issuance of a patent.

§ 1.666(b)—for access to an interference settlement agreement.

§ 3.81—for a patent to issue to assignee, assignment submitted after payment of the issue fee.

* * * * *

(q) For filing a petition to the Commissioner under a section listed below which refers to this paragraph.....50.00

§ 1.41—to supply the names or names of the inventor or inventors after the filing date without a cover sheet as prescribed by § 1.51(c)(1) in a provisional application.

§ 1.48—for correction of inventorship in a provisional application.

§ 1.53—to accord a provisional application a filing date or to convert a nonprovisional application filed under § 1.53(b) to a provisional application under § 1.53(c).

* * * * *

11. Section 1.21 is amended by revising paragraphs (l) and (n) to read as follows:

**§ 1.21 Miscellaneous fees and charges.**

* * * * *

(l) For processing and retaining any application abandoned pursuant to § 1.53(f), unless the required basic filing fee (§ 1.16) has been paid .....130.00

* * * * *

(n) For handling an application in which proceedings are terminated pursuant to § 1.53(e) .....130.00

* * * * *

12. Section 1.26 is amended by revising paragraph (a) to read as follows:

**§ 1.26 Refunds.**

(a) Any fee paid by actual mistake or in excess of that required will be refunded, but a mere change of purpose after the payment of money, as when a party desires to withdraw an application, an appeal, or a request for oral hearing, will not entitle a party to demand such a return. Amounts of twenty-five dollars or less will not be returned unless specifically requested within a reasonable time, nor will the payer be notified of such amounts; amounts over twenty-five dollars may be returned by check or, if requested, by credit to a deposit account.

* * * * *

13. Section 1.27 is revised to read as follows:

**§ 1.27 Statement of status as small entity.**

(a) Any person seeking to establish status as a small entity (§ 1.9(f) of this part) for purposes of paying fees in an application or a patent must file a statement in the application or patent prior to or with the first fee paid as a small entity. Such a statement need only be filed once in an application or patent and remains in effect until changed.

(b) When establishing status as a small entity pursuant to paragraph (a) of this section, any statement filed on behalf of an independent inventor must be signed by the independent inventor except as provided in § 1.42, § 1.43, or § 1.47 of this part and must state that the inventor qualifies as an independent inventor in accordance with § 1.9(c) of this part. Where there are joint inventors in an application, each inventor must file a statement establishing status as an independent inventor in order to qualify as a small entity. Where any rights have been assigned, granted, conveyed, or licensed, or there is an obligation to assign, grant, convey, or license, any rights to a small business concern, a nonprofit organization, or any other individual, a statement must be filed by the individual, the owner of the small business concern, or an official of the small business concern or nonprofit organization empowered to act on behalf of the small business concern or nonprofit organization identifying their status. For purposes of a statement under this paragraph, a license to a Federal agency resulting from a funding agreement with that agency pursuant to 35 U.S.C. 202(c)(4) does not constitute a license as set forth in § 1.9 of this part.

(c)(1) Any statement filed pursuant to paragraph (a) of this section on behalf of a small business concern must:

(i) Be signed by the owner or an official of the small business concern empowered to act on behalf of the concern;

(ii) State that the concern qualifies as a small business concern as defined in § 1.9(d); and

(iii) State that the exclusive rights to the invention have been conveyed to and remain with the small business concern or, if the rights are not exclusive, that all other rights belong to small entities as defined in § 1.9.

(2) Where the rights of the small business concern as a small entity are not exclusive, a statement must also be filed by the other small entities having rights stating their status as such. For purposes of a statement under this paragraph, a license to a Federal agency resulting from a funding agreement with that agency pursuant to 35 U.S.C. 202(c)(4) does not constitute a license as set forth in § 1.9 of this part.

(d)(1) Any statement filed pursuant to paragraph (a) of this section on behalf of a nonprofit organization must:

(i) Be signed by an official of the nonprofit organization empowered to act on behalf of the organization;

(ii) State that the organization qualifies as a nonprofit organization as defined in § 1.9(e) of this part specifying under which one of § 1.9(e) (1), (2), (3), or (4) of this part the organization qualifies; and

(iii) State that exclusive rights to the invention have been conveyed to and remain with the organization or if the rights are not exclusive that all other rights belong to small entities as defined in § 1.9 of this part.

(2) Where the rights of the nonprofit organization as a small entity are not exclusive, a statement must also be filed by the other small entities having rights stating their status as such. For purposes of a statement under this paragraph, a license to a Federal agency pursuant to 35 U.S.C. 202(c)(4) does not constitute a conveyance of rights as set forth in this paragraph.

14. Section 1.28 is amended by revising paragraphs (a) and (c) to read as follows:

**§ 1.28 Effect on fees of failure to establish status, or change status, as a small entity.**

(a)(1) The failure to establish status as a small entity (§§ 1.9(f) and 1.27 of this part) in any application or patent prior to paying, or at the time of paying, any fee precludes payment of the fee in the amount established for small entities. A refund pursuant to § 1.26 of this part, based on establishment of small entity status, of a portion of fees timely paid in full prior to establishing status as a small entity may only be obtained if a statement under § 1.27 and a request for a refund of the excess amount are filed within two months of the date of the timely payment of the full fee. The two-month time period is not extendable under § 1.136. Status as a small entity is waived for any fee by the failure to establish the status prior to paying, at the time of paying, or within two months of the date of payment of, the fee.

(2) Status as a small entity must be specifically established in each application or patent in which the status is available and desired. Status as a small entity in one application or patent does not affect any other application or patent, including applications or patents which are directly or indirectly dependent upon the application or patent in which the status has been

party desires to withdraw an application, an appeal, or a request for oral hearing, will not entitle a party to demand such a return. Amounts of twenty-five dollars or less will not be returned unless specifically requested within a reasonable time, nor will the payer be notified of such amounts; amounts over twenty-five dollars may be returned by check or, if requested, by credit to a deposit account.

* * * * *

and remain with the small business concern or, if the rights are not exclusive, that all other rights belong to small entities as defined in § 1.9.

(2) Where the rights of the small business concern as a small entity are not exclusive, a statement must also be filed by the other small entities having rights stating their status as such. For purposes of a statement under this paragraph, a license to a Federal agency resulting from a funding agreement with

months of the date of payment of, the fee.

(2) Status as a small entity must be specifically established in each application or patent in which the status is available and desired. Status as a small entity in one application or patent does not affect any other application or patent, including applications or patents which are directly or indirectly dependent upon the application or patent in which the status has been

established. The refiling of an application under § 1.53 as a continuation, division, or continuation-in-part (including a continued prosecution application under § 1.53(d)), or the filing of a reissue application requires a new determination as to continued entitlement to small entity status for the continuing or reissue application. A nonprovisional application claiming benefit under 35 U.S.C. 119(e), 120, 121, or 365(c) of a prior application, or a reissue application may rely on a statement filed in the prior application or in the patent if the nonprovisional application or the reissue application includes a reference to the statement in the prior application or in the patent or includes a copy of the statement in the prior application or in the patent and status as a small entity is still proper and desired. The payment of the small entity basic statutory filing fee will be treated as such a reference for purposes of this section.

(3) Once status as a small entity has been established in an application or patent, the status remains in that application or patent without the filing of a further statement pursuant to § 1.27 of this part unless the Office is notified of a change in status.

* * * * *

(c) If status as a small entity is established in good faith, and fees as a small entity are paid in good faith, in any application or patent, and it is later discovered that such status as a small entity was established in error or that through error the Office was not notified of a change in status as required by paragraph (b) of this section, the error will be excused upon payment of the deficiency between the amount paid and the amount due. The deficiency is based on the amount of the fee, for other than a small entity, in effect at the time the deficiency is paid in full.

* * * * *

15. Section 1.33 is amended by revising paragraphs (a) and (b) to read as follows:

**§ 1.33 Correspondence respecting patent applications, reexamination proceedings, and other proceedings.**

(a) The applicant, the assignee(s) of the entire interest (see §§ 3.71 and 3.73) or an attorney or agent of record (see § 1.34(b)) may specify a correspondence address to which communications about the application are to be directed. All notices, official letters, and other communications in the application will be directed to the correspondence address or, if no such correspondence address is specified, to an attorney or agent of record (see § 1.34(b)), or, if no attorney or agent is of record, to the applicant, so long as a post office address has been furnished in the application. Double correspondence with an applicant and an attorney or agent, or with more than one attorney or agent, will not be undertaken. If more than one attorney or agent is made of record and a correspondence address has not been specified, correspondence will be held with the one last made of record.

(b) Amendments and other papers filed in the application must be signed by:

(1) An attorney or agent of record appointed in compliance with § 1.34(b);

(2) A registered attorney or agent not of record who acts in a representative capacity under the provisions of § 1.34(a);

(3) The assignee of record of the entire interest, if there is an assignee of record of the entire interest;

(4) An assignee of record of an undivided part interest, and any assignee(s) of the remaining interest and any applicant retaining an interest, if there is an assignee of record of an undivided part interest; or

(5) All of the applicants (§§ 1.42, 1.43 and 1.47) for patent, unless there is an assignee of record of the entire interest and such assignee has taken action in the application in accordance with §§ 3.71 and 3.73.

* * * * *

16. Section 1.41 is amended by revising paragraph (a) to read as follows:

**§ 1.41 Applicant for patent.**

(a) A patent is applied for in the name or names of the actual inventor or inventors.

(1) The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.63, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(i) is filed supplying or changing the name or names of the inventor or inventors.

(2) The inventorship of a provisional application is that inventorship set forth in the cover sheet as prescribed by § 1.51(c)(1). If a cover sheet as prescribed by § 1.51(c)(1) is not filed during the pendency of a provisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(c), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(q) is filed supplying or changing the name or names of the inventor or inventors.

(3) In a nonprovisional application filed without an oath or declaration as prescribed by § 1.63 or a provisional application filed without a cover sheet as prescribed by § 1.51(c)(1), the name or names of person or persons believed to be the actual inventor or inventors should be provided for identification purposes when the application papers pursuant to § 1.53(b) or (c) are filed. If no name of a person believed to be an actual inventor is so provided, the application should include an applicant identifier consisting of alphanumeric characters.

* * * * *

17. Section 1.47 is revised to read as follows:

**§ 1.47 Filing when an inventor refuses to sign or cannot be reached.**

(a) If a joint inventor refuses to join in an application for patent or cannot be found or reached after diligent effort, the application may be made by the other inventor on behalf of himself or herself and the nonsigning inventor. The oath or declaration in such an application must be accompanied by a petition including proof of the pertinent facts, the fee set forth in § 1.17(i) and the last known address of the nonsigning inventor. The Patent and Trademark Office shall, except in a continued prosecution application under § 1.53(d), forward notice of the filing of the application to the nonsigning inventor at said address and publish notice of the filing of the application in the *Official Gazette*. The nonsigning inventor may subsequently join in the application on filing an oath or declaration complying with § 1.63.

(b) Whenever all of the inventors refuse to execute an application for patent, or cannot be found or reached after diligent effort, a person to whom an inventor has assigned or agreed in writing to assign the invention or who otherwise shows sufficient proprietary interest in the matter justifying such action may make application for patent on behalf of and as agent for all the inventors. The oath or declaration in such an application must be accompanied by a petition including proof of the pertinent facts, a showing that such action is necessary to preserve the rights of the parties or to prevent irreparable damage, the fee set forth in § 1.17(i), and the last known address of all of the inventors. The Office shall, except in a continued prosecution application under § 1.53(d), forward

(a) The applicant, the assignee(s) of the entire interest (see §§ 3.71 and 3.73) or an attorney or agent of record (see § 1.34(b)) may specify a correspondence address to which communications about the application are to be directed. All notices, official letters, and other communications in the application will be directed to the correspondence address or, if no such correspondence address is specified, to an attorney or agent of record (see § 1.34(b)), or, if no

the fee set forth in § 1.17(i) is filed supplying or changing the name or names of the inventor or inventors.

(2) The inventorship of a provisional application is that inventorship set forth in the cover sheet as prescribed by § 1.51(c)(1). If a cover sheet as prescribed by § 1.51(c)(1) is not filed during the pendency of a provisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(c), unless

on behalf of and as agent for all the inventors. The oath or declaration in such an application must be accompanied by a petition including proof of the pertinent facts, a showing that such action is necessary to preserve the rights of the parties or to prevent irreparable damage, the fee set forth in § 1.17(i), and the last known address of all of the inventors. The Office shall, except in a continued prosecution application under § 1.53(d), forward

notice of the filing of the application to all of the inventors at the addresses stated in the application and publish notice of the filing of the application in the *Official Gazette*. An inventor may subsequently join in the application on filing an oath or declaration complying with § 1.63.

18. Section 1.48 is revised to read as follows:

**§ 1.48 Correction of inventorship in a patent application, other than a reissue application.**

(a) If the inventive entity is set forth in error in an executed § 1.63 oath or declaration in an application, other than a reissue application, and such error arose without any deceptive intention on the part of the person named as an inventor in error or on the part of the person who through error was not named as an inventor, the application may be amended to name only the actual inventor or inventors. When the application is involved in an interference, the amendment must comply with the requirements of this section and must be accompanied by a motion under § 1.634. Such amendment must be accompanied by:

(1) A petition including a statement from each person being added as an inventor and from each person being deleted as an inventor that the error in inventorship occurred without deceptive intention on his or her part;

(2) An oath or declaration by the actual inventor or inventors as required by § 1.63 or as permitted by §§ 1.42, 1.43 or 1.47;

(3) The fee set forth in § 1.17(i); and

(4) If an assignment has been executed by any of the original named inventors, the written consent of the assignee (see § 3.73(b)).

(b) If the correct inventors are named in a nonprovisional application, other than a reissue application, and the prosecution of the application results in the amendment or cancellation of claims so that fewer than all of the currently named inventors are the actual inventors of the invention being claimed in the application, an amendment must be filed deleting the name or names of the person or persons who are not inventors of the invention being claimed. When the application is involved in an interference, the amendment must comply with the requirements of this section and must be accompanied by a motion under § 1.634. Such amendment must be accompanied by:

(1) A petition including a statement identifying each named inventor who is being deleted and acknowledging that the inventor's invention is no longer being claimed in the application; and

(2) The fee set forth in § 1.17(i).

(c) If a nonprovisional application, other than a reissue application, discloses unclaimed subject matter by an inventor or inventors not named in the application, the application may be amended to add claims to the subject matter and name the correct inventors for the application. When the application is involved in an interference, the amendment must comply with the requirements of this section and must be accompanied by a motion under § 1.634. Such amendment must be accompanied by:

(1) A petition including a statement from each person being added as an inventor that the amendment is necessitated by amendment of the claims and that the inventorship error occurred without deceptive intention on his or her part;

(2) An oath or declaration by the actual inventor or inventors as required by § 1.63 or as permitted by §§ 1.42, 1.43 or 1.47;

(3) The fee set forth in § 1.17(i); and

(4) If an assignment has been executed by any of the original named inventors, the written consent of the assignee (see § 3.73(b)).

(d) If the name or names of an inventor or inventors were omitted in a provisional application through error without any deceptive intention on the part of the omitted inventor or inventors, the provisional application may be amended to add the name or names of the omitted inventor or inventors. Such amendment must be accompanied by:

(1) A petition including a statement that the inventorship error occurred without deceptive intention on the part of the omitted inventor or inventors; and

(2) The fee set forth in § 1.17(q).

(e) If a person or persons were named as an inventor or inventors in a provisional application through error without any deceptive intention on the part of such person or persons, an amendment may be filed in the provisional application deleting the name or names of the person or persons who were erroneously named. Such amendment must be accompanied by:

(1) A petition including a statement by the person or persons whose name or names are being deleted that the inventorship error occurred without deceptive intention on the part of such person or persons;

(2) The fee set forth in § 1.17(q); and

(3) If an assignment has been executed by any of the original named inventors, the written consent of the assignee (see § 3.73(b)).

(f)(1) If the correct inventor or inventors are not named on filing a nonprovisional application under § 1.53(b) without an executed oath or declaration under § 1.63, the later submission of an executed oath or declaration under § 1.63 during the pendency of the application will act to correct the earlier identification of inventorship.

(2) If the correct inventor or inventors are not named on filing a provisional application without a cover sheet under § 1.51(c)(1), the later submission of a cover sheet under § 1.51(c)(1) during the pendency of the application will act to correct the earlier identification of inventorship.

(g) The Office may require such other information as may be deemed appropriate under the particular circumstances surrounding the correction of inventorship.

19. Section 1.51 is revised to read as follows:

**§ 1.51 General requisites of an application.**

(a) Applications for patents must be made to the Commissioner of Patents and Trademarks.

(b) A complete application filed under § 1.53(b) comprises:

(1) A specification as prescribed by 35 U.S.C. 112, including a claim or claims, see §§ 1.71 to 1.77;

(2) An oath or declaration, see § 1.63 and § 1.68;

(3) Drawings, when necessary, see §§ 1.81 to 1.85; and

(4) The prescribed filing fee, see § 1.16.

(c) A complete provisional application filed under § 1.53(c) comprises:

(1) A cover sheet identifying:

(i) The application as a provisional application,

(ii) The name or names of the inventor or inventors, (see § 1.41(a)(2)),

(iii) The residence of each named inventor,

(iv) The title of the invention,

(v) The name and registration number of the attorney or agent (if applicable),

(vi) The docket number used by the person filing the application to identify the application (if applicable),

(vii) The correspondence address, and

(viii) The name of the U.S. Government agency and Government contract number (if the invention was made by an agency of the U.S. Government or under a contract with an agency of the U.S. Government);

(2) A specification as prescribed by the first paragraph of 35 U.S.C. 112, see § 1.71;

the person or persons who are not inventors of the invention being claimed. When the application is involved in an interference, the amendment must comply with the requirements of this section and must be accompanied by a motion under § 1.634. Such amendment must be accompanied by:

(1) A petition including a statement identifying each named inventor who is being deleted and acknowledging that

name or names of the person or persons who were erroneously named. Such amendment must be accompanied by:

(1) A petition including a statement by the person or persons whose name or names are being deleted that the inventorship error occurred without deceptive intention on the part of such person or persons;

(2) The fee set forth in § 1.17(q); and

(3) If an assignment has been executed by any of the original named inventors,

person filing the application to identify the application (if applicable),

(vii) The correspondence address, and

(viii) The name of the U.S. Government agency and Government contract number (if the invention was made by an agency of the U.S. Government or under a contract with an agency of the U.S. Government);

(2) A specification as prescribed by the first paragraph of 35 U.S.C. 112, see § 1.71;

(3) Drawings, when necessary, see §§ 1.81 to 1.85; and

(4) The prescribed filing fee, see § 1.16.

(d) Applicants are encouraged to file an information disclosure statement in nonprovisional applications. See § 1.97 and § 1.98. No information disclosure statement may be filed in a provisional application.

20. Section 1.52 is amended by revising paragraphs (a), (c) and (d) to read as follows:

**§ 1.52 Language, paper, writing, margins.**

(a) The application, any amendments or corrections thereto, and the oath or declaration must be in the English language except as provided for in § 1.69 and paragraph (d) of this section, or be accompanied by a translation of the application and a translation of any corrections or amendments into the English language together with a statement that the translation is accurate. All papers which are to become a part of the permanent records of the Patent and Trademark Office must be legibly written either by a typewriter or mechanical printer in permanent dark ink or its equivalent in portrait orientation on flexible, strong, smooth, non-shiny, durable, and white paper. All of the application papers must be presented in a form having sufficient clarity and contrast between the paper and the writing thereon to permit the direct reproduction of readily legible copies in any number by use of photographic, electrostatic, photo-offset, and microfilming processes and electronic reproduction by use of digital imaging and optical character recognition. If the papers are not of the required quality, substitute typewritten or mechanically printed papers of suitable quality will be required. See § 1.125 for filing substitute typewritten or mechanically printed papers constituting a substitute specification when required by the Office.

* * * * *

(c) Any interlineation, erasure, cancellation or other alteration of the application papers filed should be made on or before the signing of any accompanying oath or declaration pursuant to § 1.63 referring to those application papers and should be dated and initialed or signed by the applicant on the same sheet of paper. Application papers containing alterations made after the signing of an oath or declaration referring to those application papers must be supported by a supplemental oath or declaration under § 1.67(c). After the signing of the oath or declaration referring to the application papers, amendments may only be made in the manner provided by § 1.121.

(d) An application may be filed in a language other than English. An English translation of the non-English-language application, a statement that the translation is accurate, and the fee set forth in § 1.17(k) are required to be filed with the application or within such time as may be set by the Office.

21. Section 1.53 is revised to read as follows:

**§ 1.53 Application number, filing date, and completion of application.**

(a) *Application number.* Any papers received in the Patent and Trademark Office which purport to be an application for a patent will be assigned an application number for identification purposes.

(b) *Application filing requirements—Nonprovisional application.* The filing date of an application for patent filed under this section, except for a provisional application under paragraph (c) of this section or a continued prosecution application under paragraph (d) of this section, is the date on which a specification as prescribed by 35 U.S.C. 112 containing a description pursuant to § 1.71 and at least one claim pursuant to § 1.75, and any drawing required by § 1.81(a) are filed in the Patent and Trademark Office. No new matter may be introduced into an application after its filing date. A continuing application, which may be a continuation, divisional, or continuation-in-part application, may be filed under the conditions specified in 35 U.S.C. 120, 121 or 365(c) and § 1.78(a).

(1) A continuation or divisional application that names as inventors the same or fewer than all of the inventors named in the prior application may be filed under this paragraph or paragraph (d) of this section.

(2) A continuation-in-part application (which may disclose and claim subject matter not disclosed in the prior application) or a continuation or divisional application naming an inventor not named in the prior application must be filed under this paragraph.

(c) *Application filing requirements—Provisional application.* The filing date of a provisional application is the date on which a specification as prescribed by the first paragraph of 35 U.S.C. 112, and any drawing required by § 1.81(a) are filed in the Patent and Trademark Office. No amendment, other than to make the provisional application comply with the patent statute and all applicable regulations, may be made to the provisional application after the filing date of the provisional application.

(1) A provisional application must also include the cover sheet required by § 1.51(c)(1) or a cover letter identifying the application as a provisional application. Otherwise, the application will be treated as an application filed under paragraph (b) of this section.

(2) An application for patent filed under paragraph (b) of this section may be converted to a provisional application and be accorded the original filing date of the application filed under paragraph (b) of this section,

(i) Provided that a petition requesting the conversion, with the fee set forth in § 1.17(q), is filed prior to the earliest of:

(A) Abandonment of the application filed under paragraph (b) of this section;

(B) Payment of the issue fee on the application filed under paragraph (b) of this section;

(C) Expiration of twelve months after the filing date of the application filed under paragraph (b) of this section; or

(D) The filing of a request for a statutory invention registration under § 1.293 in the application filed under paragraph (b) of this section.

(ii) The grant of any such petition will not entitle applicant to a refund of the fees which were properly paid in the application filed under paragraph (b) of this section.

(3) A provisional application is not entitled to the right of priority under 35 U.S.C. 119 or 365(a) or § 1.55, or to the benefit of an earlier filing date under 35 U.S.C. 120, 121 or 365(c) or § 1.78 of any other application. No claim for priority under § 1.78(a)(3) may be made in a design application based on a provisional application. No request under § 1.293 for a statutory invention registration may be filed in a provisional application. The requirements of §§ 1.821 through 1.825 regarding application disclosures containing nucleotide and/or amino acid sequences are not mandatory for provisional applications.

(d) *Application filing requirements—Continued prosecution (nonprovisional) application.* (1) A continuation or divisional application (but not a continuation-in-part) of a prior nonprovisional application may be filed as a continued prosecution application under this paragraph, provided that:

(i) The prior nonprovisional application is either:

(A) Complete as defined by § 1.51(b) and filed on or after June 8, 1995; or

(B) The national stage of an international application in compliance with 35 U.S.C. 371 and filed on or after June 8, 1995; and

accompanying oath or declaration pursuant to § 1.63 referring to those application papers and should be dated and initialed or signed by the applicant on the same sheet of paper. Application papers containing alterations made after the signing of an oath or declaration referring to those application papers must be supported by a supplemental oath or declaration under § 1.67(c). After the signing of the oath or declaration referring to the application papers,

(c) *Application filing requirements—Provisional application.* The filing date of a provisional application is the date on which a specification as prescribed by the first paragraph of 35 U.S.C. 112, and any drawing required by § 1.81(a) are filed in the Patent and Trademark Office. No amendment, other than to make the provisional application comply with the patent statute and all applicable regulations, may be made to the provisional application after the

continuation-in-part) of a prior nonprovisional application may be filed as a continued prosecution application under this paragraph, provided that:

(i) The prior nonprovisional application is either:

(A) Complete as defined by § 1.51(b) and filed on or after June 8, 1995; or

(B) The national stage of an international application in compliance with 35 U.S.C. 371 and filed on or after June 8, 1995; and

(ii) The application under this paragraph is filed before the earliest of:

(A) Payment of the issue fee on the prior application, unless a petition under § 1.313(b)(5) is granted in the prior application;

(B) Abandonment of the prior application; or

(C) Termination of proceedings on the prior application.

(2) The filing date of a continued prosecution application is the date on which a request on a separate paper for an application under this paragraph is filed. An application filed under this paragraph:

(i) Must identify the prior application;

(ii) Discloses and claims only subject matter disclosed in the prior application;

(iii) Names as inventors the same inventors named in the prior application on the date the application under this paragraph was filed, except as provided in paragraph (d)(4) of this section;

(iv) Includes the request for an application under this paragraph, will utilize the file jacket and contents of the prior application, including the specification, drawings and oath or declaration from the prior application, to constitute the new application, and will be assigned the application number of the prior application for identification purposes; and

(v) Is a request to expressly abandon the prior application as of the filing date of the request for an application under this paragraph.

(3) The filing fee for a continued prosecution application filed under this paragraph is:

(i) The basic filing fee as set forth in § 1.16; and

(ii) Any additional § 1.16 fee due based on the number of claims remaining in the application after entry of any amendment accompanying the request for an application under this paragraph and entry of any amendments under § 1.116 unentered in the prior application which applicant has requested to be entered in the continued prosecution application.

(4) An application filed under this paragraph may be filed by fewer than all the inventors named in the prior application, provided that the request for an application under this paragraph when filed is accompanied by a statement requesting deletion of the name or names of the person or persons who are not inventors of the invention being claimed in the new application. No person may be named as an inventor in an application filed under this paragraph who was not named as an inventor in the prior application on the date the application under this paragraph was filed, except by way of a petition under § 1.48.

(5) Any new change must be made in the form of an amendment to the prior application as it existed prior to the filing of an application under this paragraph. No amendment in an application under this paragraph (a continued prosecution application) may introduce new matter or matter that would have been new matter in the prior application. Any new specification filed with the request for an application under this paragraph will not be considered part of the original application papers, but will be treated as a substitute specification in accordance with § 1.125.

(6) The filing of a continued prosecution application under this paragraph will be construed to include a waiver of confidentiality by the applicant under 35 U.S.C. 122 to the extent that any member of the public, who is entitled under the provisions of § 1.14 to access to, copies of, or information concerning either the prior application or any continuing application filed under the provisions of this paragraph, may be given similar access to, copies of, or similar information concerning the other application or applications in the file jacket.

(7) A request for an application under this paragraph is the specific reference required by 35 U.S.C. 120 to every application assigned the application number identified in such request. No amendment in an application under this paragraph may delete this specific reference to any prior application.

(8) In addition to identifying the application number of the prior application, applicant should furnish in the request for an application under this paragraph the following information relating to the prior application to the best of his or her ability:

(i) Title of invention;

(ii) Name of applicant(s); and

(iii) Correspondence address.

(9) Envelopes containing only requests and fees for filing an application under this paragraph should be marked "Box CPA." Requests for an application under this paragraph filed by facsimile transmission should be clearly marked "Box CPA."

(e) *Failure to meet filing date requirements.* (1) If an application deposited under paragraph (b), (c), or (d) of this section does not meet the requirements of such paragraph to be entitled to a filing date, applicant will be so notified, if a correspondence address has been provided, and given a time period within which to correct the filing error.

(2) Any request for review of a notification pursuant to paragraph (e)(1) of this section, or a notification that the original application papers lack a portion of the specification or drawing(s), must be by way of a petition pursuant to this paragraph. Any petition under this paragraph must be accompanied by the fee set forth in § 1.17(i) in an application filed under paragraphs (b) or (d) of this section, and the fee set forth in § 1.17(q) in an application filed under paragraph (c) of this section. In the absence of a timely (§ 1.181(f)) petition pursuant to this paragraph, the filing date of an application in which the applicant was notified of a filing error pursuant to paragraph (e)(1) of this section will be the date the filing error is corrected.

(3) If an applicant is notified of a filing error pursuant to paragraph (e)(1) of this section, but fails to correct the filing error within the given time period or otherwise timely (§ 1.181(f)) take action pursuant to this paragraph, proceedings in the application will be considered terminated. Where proceedings in an application are terminated pursuant to this paragraph, the application may be disposed of, and any filing fees, less the handling fee set forth in § 1.21(n), will be refunded.

(f) *Completion of application subsequent to filing—Nonprovisional (including continued prosecution) application.* If an application which has been accorded a filing date pursuant to paragraph (b) of this section, including a continuation, divisional, or continuation-in-part application, does not include the appropriate filing fee or an oath or declaration by the applicant pursuant to § 1.63 or § 1.175, or, if an application which has been accorded a filing date pursuant to paragraph (d) of this section does not include the appropriate filing fee, applicant will be so notified, if a correspondence address has been provided, and given a period of time within which to file the fee, oath or declaration, and the surcharge as set forth in § 1.16(e) in order to prevent abandonment of the application. See § 1.63(d) concerning the submission of a copy of the oath or declaration from the prior application for a continuation or divisional application. If the required filing fee is not timely paid, or if the processing and retention fee set forth in § 1.21(l) is not paid within one year of the date of mailing of the notification required by this paragraph, the application may be disposed of. The notification pursuant to this paragraph may be made simultaneously with any notification pursuant to paragraph (e) of

the inventors named in the prior application, provided that the request for an application under this paragraph when filed is accompanied by a statement requesting deletion of the name or names of the person or persons who are not inventors of the invention being claimed in the new application. No person may be named as an inventor in an application filed under this paragraph who was not named as an inventor in the prior application on the

be marked "Box CPA." Requests for an application under this paragraph filed by facsimile transmission should be clearly marked "Box CPA."

(e) *Failure to meet filing date requirements.* (1) If an application deposited under paragraph (b), (c), or (d) of this section does not meet the requirements of such paragraph to be entitled to a filing date, applicant will be so notified, if a correspondence address has been provided, and given a

copy of the oath or declaration from the prior application for a continuation or divisional application. If the required filing fee is not timely paid, or if the processing and retention fee set forth in § 1.21(l) is not paid within one year of the date of mailing of the notification required by this paragraph, the application may be disposed of. The notification pursuant to this paragraph may be made simultaneously with any notification pursuant to paragraph (e) of

this section. If no correspondence address is included in the application, applicant has two months from the filing date to file the basic filing fee, the oath or declaration in an application under paragraph (b) of this section, and the surcharge as set forth in § 1.16(e) in order to prevent abandonment of the application; or, if no basic filing fee has been paid, one year from the filing date to pay the processing and retention fee set forth in § 1.21(l) to prevent disposal of the application.

(g) *Completion of application subsequent to filing—Provisional application.* If a provisional application which has been accorded a filing date pursuant to paragraph (c) of this section does not include the appropriate filing fee or the cover sheet required by § 1.51(c)(1), applicant will be so notified, if a correspondence address has been provided, and given a period of time within which to file the fee, cover sheet, and the surcharge as set forth in § 1.16(l) in order to prevent abandonment of the application. If the required filing fee is not timely paid, the application may be disposed of. The notification pursuant to this paragraph may be made simultaneously with any notification pursuant to paragraph (e) of this section. If no correspondence address is included in the application, applicant has two months from the filing date to file the basic filing fee, cover sheet, and the surcharge as set forth in § 1.16(l) in order to prevent abandonment of the application.

(h) *Subsequent treatment of application—Nonprovisional (including continued prosecution) application.* An application for a patent filed under paragraphs (b) or (d) of this section will not be placed on the files for examination until all its required parts, complying with the rules relating thereto, are received, except that certain minor informalities may be waived subject to subsequent correction whenever required.

(i) *Subsequent treatment of application—Provisional application.* A provisional application for a patent filed under paragraph (c) of this section will not be placed on the files for examination and will become abandoned no later than twelve months after its filing date pursuant to 35 U.S.C. 111(b)(1).

(j) *Filing date of international application.* The filing date of an international application designating the United States of America is treated as the filing date in the United States of America under PCT Article 11(3), except as provided in 35 U.S.C. 102(e).

22. Section 1.54 is revised to read as follows:

**§ 1.54 Parts of application to be filed together; filing receipt.**

(a) It is desirable that all parts of the complete application be deposited in the Office together; otherwise, a letter must accompany each part, accurately and clearly connecting it with the other parts of the application. See § 1.53 (f) and (g) with regard to completion of an application.

(b) Applicant will be informed of the application number and filing date by a filing receipt, unless the application is an application filed under § 1.53(d).

23. Section 1.55 is amended by revising paragraph (a) to read as follows:

**§ 1.55 Claim for foreign priority.**

(a) An applicant in a nonprovisional application may claim the benefit of the filing date of one or more prior foreign applications under the conditions specified in 35 U.S.C. 119 (a) through (d) and 172. The claim to priority need be in no special form and may be made by the attorney or agent if the foreign application is referred to in the oath or declaration as required by § 1.63. The claim for priority and the certified copy of the foreign application specified in 35 U.S.C. 119(b) must be filed in the case of an interference (§ 1.630), when necessary to overcome the date of a reference relied upon by the examiner, when specifically required by the examiner, and in all other situations, before the patent is granted. If the claim for priority or the certified copy of the foreign application is filed after the date the issue fee is paid, it must be accompanied by a petition requesting entry and by the fee set forth in § 1.17(i). If the certified copy is not in the English language, a translation need not be filed except in the case of interference; or when necessary to overcome the date of a reference relied upon by the examiner; or when specifically required by the examiner, in which event an English language translation must be filed together with a statement that the translation of the certified copy is accurate.

* * * * *

24. Section 1.59 is revised to read as follows:

**§ 1.59 Expungement of information or copy of papers in application file.**

(a) (1) Information in an application will not be expunged and returned, except as provided in paragraph (b) of this section. See § 1.618 for return of unauthorized and improper papers in interferences.

(2) Information forming part of the original disclosure (*i.e.*, written specification including the claims, drawings, and any preliminary amendment specifically incorporated into an executed oath or declaration under §§ 1.63 and 1.175) will not be expunged from the application file.

(b) Information, other than what is excluded by paragraph (a)(2) of this section, may be requested to be expunged and returned to applicant upon petition under this paragraph and payment of the petition fee set forth in § 1.17(i). Any petition to expunge and return information from an application must establish to the satisfaction of the Commissioner that the return of the information is appropriate.

(c) Upon request by an applicant and payment of the fee specified in § 1.19(b), the Office will furnish copies of an application, unless the application has been disposed of (see § 1.53 (e), (f) and (g)). The Office cannot provide or certify copies of an application that has been disposed of.

**§ 1.60 [Removed and reserved]**

25. Section 1.60 is removed and reserved.

**§ 1.62 [Removed and reserved]**

26. Section 1.62 is removed and reserved.

27. Section 1.63 is amended by revising paragraphs (a) and (d) and adding a paragraph (e) to read as follows:

**§ 1.63 Oath or declaration.**

(a) An oath or declaration filed under § 1.51(b)(2) as a part of an application must:

(1) Be executed in accordance with either § 1.66 or § 1.68;

(2) Identify the specification to which it is directed;

(3) Identify each inventor by: full name, including the family name, and at least one given name without abbreviation together with any other given name or initial, and the residence, post office address and country of citizenship of each inventor; and

(4) State whether the inventor is a sole or joint inventor of the invention claimed.

* * * * *

(d)(1) A newly executed oath or declaration is not required under § 1.51(b)(2) and § 1.53(f) in a continuation or divisional application, provided that:

(i) The prior nonprovisional application contained an oath or declaration as prescribed by paragraphs (a) through (c) of this section;

(ii) The continuation or divisional application was filed by all or by fewer than all of the inventors named in the prior application;

(iii) The specification and drawings filed in the continuation or divisional

examination and will become abandoned no later than twelve months after its filing date pursuant to 35 U.S.C. 111(b)(1).

(j) *Filing date of international application.* The filing date of an international application designating the United States of America is treated as the filing date in the United States of America under PCT Article 11(3), except as provided in 35 U.S.C. 102(e).

22. Section 1.54 is revised to read as follows:

§ 1.59 Expungement of information or copy of papers in application file.

(a) (1) Information in an application will not be expunged and returned, except as provided in paragraph (b) of this section. See § 1.618 for return of unauthorized and improper papers in interferences.

(2) Information forming part of the original disclosure (*i.e.*, written specification including the claims, drawings, and any preliminary

§ 1.51(b)(2) and § 1.53(f) in a continuation or divisional application, provided that:

(i) The prior nonprovisional application contained an oath or declaration as prescribed by paragraphs (a) through (c) of this section;

(ii) The continuation or divisional application was filed by all or by fewer than all of the inventors named in the prior application;

(iii) The specification and drawings filed in the continuation or divisional

Sunday, or Federal holiday within the District of Columbia which for copendency would require the nonprovisional application to be filed on or prior to the Saturday, Sunday, or Federal holiday. In order for a nonprovisional application to claim the benefit of one or more prior filed copending provisional applications, each prior provisional application must name as an inventor at least one inventor named in the later filed nonprovisional application and disclose the named inventor's invention claimed in at least one claim of the later filed nonprovisional application in the manner provided by the first paragraph of 35 U.S.C. 112. In addition, each prior provisional application must be:

(i) Complete as set forth in § 1.51(c); or

(ii) Entitled to a filing date as set forth in § 1.53(c) and include the basic filing fee set forth in § 1.16(k).

(4) Any nonprovisional application claiming the benefit of one or more prior filed copending provisional applications must contain or be amended to contain in the first sentence of the specification following the title a reference to each such prior provisional application, identifying it as a provisional application, and including the provisional application number (consisting of series code and serial number).

* * * * *

31. Section 1.84 is amended by revising paragraphs (a)(2)(i), (b), (c) and (g) to read as follows:

**§ 1.84 Standards for drawings.**

(a) * * *

(2) * * *

(i) The fee set forth in § 1.17(i);

* * * * *

(b) *Photographs*—(1) *Black and white.* Photographs are not ordinarily permitted in utility patent applications. However, the Office will accept photographs in utility patent applications only after the granting of a petition filed under this paragraph which requests that photographs be accepted. Any such petition must include the following:

(i) The fee set forth in § 1.17(i); and

(ii) Three (3) sets of photographs. Photographs must either be developed on double weight photographic paper or be permanently mounted on bristol board. The photographs must be of sufficient quality so that all details in the drawings are reproducible in the printed patent.

(2) Color. Color photographs will be accepted in utility patent applications if the conditions for accepting color drawings have been satisfied. See paragraph (a)(2) of this section.

(c) *Identification of drawings.* Identifying indicia, if provided, should include the application number or the title of the invention, inventor's name, docket number (if any), and the name and telephone number of a person to call if the Office is unable to match the drawings to the proper application. This information should be placed on the back of each sheet of drawings a minimum distance of 1.5 cm. (5/8 inch) down from the top of the page. In addition, a reference to the application number, or, if an application number has not been assigned, the inventor's name, may be included in the left-hand corner, provided that the reference appears within 1.5 cm. (5/8 inch) from the top of the sheet.

* * * * *

(g) *Margins.* The sheets must not contain frames around the sight (*i.e.*, the usable surface), but should have scan target points (*i.e.*, cross-hairs) printed on two catercorner margin corners. Each sheet must include a top margin of at least 2.5 cm. (1 inch), a left side margin of at least 2.5 cm. (1 inch), a right side margin of at least 1.5 cm. (5/8 inch), and a bottom margin of at least 1.0 cm. (3/8 inch), thereby leaving a sight no greater than 17.0 cm. by 26.2 cm. on 21.0 cm. by 29.7 cm. (DIN size A4) drawing sheets, and a sight no greater than 17.6 cm. by 24.4 cm. (6 15/16 by 9 5/8 inches) on 21.6 cm. by 27.9 cm. (8 1/2 by 11 inch) drawing sheets.

* * * * *

32. Section 1.91 is revised to read as follows:

**§ 1.91 Models or exhibits not generally admitted as part of application or patent.**

(a) A model or exhibit will not be admitted as part of the record of an application unless it:

(1) Substantially conforms to the requirements of § 1.52 or § 1.84;

(2) Is specifically required by the Office; or

(3) Is filed with a petition under this section including:

(i) The petition fee as set forth in § 1.17(i); and

(ii) An explanation of why entry of the model or exhibit in the file record is necessary to demonstrate patentability.

(b) Notwithstanding the provisions of paragraph (a) of this section, a model, working model, or other physical exhibit may be required by the Office if deemed necessary for any purpose in examination of the application.

**§ 1.92 [Removed and reserved]**

33. Section 1.92 is removed and reserved.

34. Section 1.97 is amended by revising paragraphs (c) through (e) to read as follows:

**§ 1.97 Filing of information disclosure statement.**

* * * * *

(c) An information disclosure statement shall be considered by the Office if filed by the applicant after the period specified in paragraph (b) of this section, provided that the information disclosure statement is filed before the mailing date of either a final action under § 1.113, or a notice of allowance under § 1.311, whichever occurs first, and is accompanied by either:

(1) A statement as specified in paragraph (e) of this section; or

(2) The fee set forth in § 1.17(p).

(d) An information disclosure statement shall be considered by the Office if filed by the applicant after the period specified in paragraph (c) of this section, provided that the information disclosure statement is filed on or before payment of the issue fee and is accompanied by:

(1) A statement as specified in paragraph (e) of this section;

(2) A petition requesting consideration of the information disclosure statement; and

(3) The petition fee set forth in § 1.17(i).

(e) A statement under this section must state either:

(1) That each item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement; or

(2) That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in § 1.56(c) more than three months prior to the filing of the information disclosure statement.

* * * * *

**§ 1.101 [Removed and reserved]**

35. Section 1.101 is removed and reserved.

36. Section 1.102 is amended by revising paragraph (a) to read as follows:

include the following:

(i) The fee set forth in § 1.17(i); and

(ii) Three (3) sets of photographs. Photographs must either be developed on double weight photographic paper or be permanently mounted on bristol board. The photographs must be of sufficient quality so that all details in the drawings are reproducible in the printed patent.

(2) Color. Color photographs will be accepted in utility patent applications if the conditions for accepting color

(i) The petition fee as set forth in § 1.17(i); and

(ii) An explanation of why entry of the model or exhibit in the file record is necessary to demonstrate patentability.

(b) Notwithstanding the provisions of paragraph (a) of this section, a model, working model, or other physical exhibit may be required by the Office if deemed necessary for any purpose in examination of the application.

contained in the information disclosure statement was known to any individual designated in § 1.56(c) more than three months prior to the filing of the information disclosure statement.

* * * * *

§ 1.101 [Removed and reserved]

35. Section 1.101 is removed and reserved.

36. Section 1.102 is amended by revising paragraph (a) to read as follows:

affidavits of the applicant and other persons.

(e) *Reasons for allowance.* If the examiner believes that the record of the prosecution as a whole does not make clear his or her reasons for allowing a claim or claims, the examiner may set forth such reasoning. The reasons shall be incorporated into an Office action rejecting other claims of the application or patent under reexamination or be the subject of a separate communication to the applicant or patent owner. The applicant or patent owner may file a statement commenting on the reasons for allowance within such time as may be specified by the examiner. Failure to file such a statement does not give rise to any implication that the applicant or patent owner agrees with or acquiesces in the reasoning of the examiner.

**§ 1.105 [Removed and reserved]**

39. Section 1.105 is removed and reserved.

**§ 1.106 [Removed and reserved]**

40. Section 1.106 is removed and reserved.

**§ 1.107 [Removed and reserved]**

41. Section 1.107 is removed and reserved.

**§ 1.108 [Removed and reserved]**

42. Section 1.108 is removed and reserved.

**§ 1.109 [Removed and reserved]**

43. Section 1.109 is removed and reserved.

44. Section 1.111 is amended by revising paragraph (b) to read as follows:

**§ 1.111 Reply by applicant or patent owner.**

* * * * *

(b) In order to be entitled to reconsideration or further examination, the applicant or patent owner must reply to the Office action. The reply by the applicant or patent owner must be reduced to a writing which distinctly and specifically points out the supposed errors in the examiner's action and must reply to every ground of objection and rejection in the prior Office action. The reply must present arguments pointing out the specific distinctions believed to render the claims, including any newly presented claims, patentable over any applied references. If the reply is with respect to an application, a request may be made that objections or requirements as to form not necessary to further consideration of the claims be held in abeyance until allowable subject matter is indicated. The applicant's or patent owner's reply must appear throughout to be a *bona fide* attempt to advance the application or the reexamination proceeding to final action. A general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references does not comply with the requirements of this section.

* * * * *

45. Section 1.112 is revised to read as follows:

**§ 1.112 Reconsideration before final action.**

After reply by applicant or patent owner (§ 1.111) to a non-final action, the application or patent under reexamination will be reconsidered and again examined. The applicant or patent owner will be notified if claims are rejected, or objections or requirements made, in the same manner as after the first examination. Applicant or patent owner may reply to such Office action in the same manner provided in § 1.111, with or without amendment, unless such Office action indicates that it is made final (§ 1.113).

46. Section 1.113 is revised to read as follows:

**§ 1.113 Final rejection or action.**

(a) On the second or any subsequent examination or consideration by the examiner the rejection or other action may be made final, whereupon applicant's or patent owner's reply is limited to appeal in the case of rejection of any claim (§ 1.191), or to amendment as specified in § 1.116. Petition may be taken to the Commissioner in the case of objections or requirements not involved in the rejection of any claim (§ 1.181). Reply to a final rejection or action must include cancellation of, or appeal from the rejection of, each rejected claim. If any claim stands allowed, the reply to a final rejection or action must comply with any requirements or objections as to form.

(b) In making such final rejection, the examiner shall repeat or state all grounds of rejection then considered applicable to the claims in the application, clearly stating the reasons in support thereof.

**§ 1.115 [Removed and Reserved]**

47. Section 1.115 is removed and reserved.

48. Section 1.116 is amended by revising its heading and paragraph (a) to read as follows:

**§ 1.116 Amendments after final action or appeal.**

(a) After a final rejection or other final action (§ 1.113), amendments may be made cancelling claims or complying with any requirement of form expressly set forth in a previous Office action. Amendments presenting rejected claims in better form for consideration on appeal may be admitted. The admission of, or refusal to admit, any amendment after final rejection, and any related proceedings, will not operate to relieve the application or patent under reexamination from its condition as subject to appeal or to save the application from abandonment under § 1.135.

* * * * *

**§ 1.117 [Removed and reserved]**

49. Section 1.117 is removed and reserved.

**§ 1.118 [Removed and reserved]**

50. Section 1.118 is removed and reserved.

**§ 1.119 [Removed and reserved]**

51. Section 1.119 is removed and reserved.

52. Section 1.121 is revised to read as follows:

**§ 1.121 Manner of making amendments.**

(a) *Amendments in nonprovisional applications, other than reissue applications*: Amendments in nonprovisional applications, excluding reissue applications, are made by filing a paper, in compliance with § 1.52, directing that specified amendments be made.

(1) *Specification other than the claims.* Except as provided in § 1.125, amendments to add matter to, or delete matter from, the specification, other than to the claims, may only be made as follows:

(i) Instructions for insertions: The precise point in the specification must be indicated where an insertion is to be made, and the matter to be inserted must be set forth.

(ii) Instructions for deletions: The precise point in the specification must be indicated where a deletion is to be made, and the matter to be deleted must be set forth or otherwise indicated.

(iii) Matter deleted by amendment can be reinstated only by a subsequent amendment presenting the previously deleted matter as a new insertion.

(2) *Claims.* Amendments to the claims may only be made as follows:

(i) Instructions for insertions and deletions: A claim may be amended by specifying only the exact matter to be deleted or inserted by an amendment and the precise point where the deletion or insertion is to be made, where the changes are limited to:

(A) Deletions and/or

out the specific distinctions believed to render the claims, including any newly presented claims, patentable over any applied references. If the reply is with respect to an application, a request may be made that objections or requirements as to form not necessary to further consideration of the claims be held in abeyance until allowable subject matter is indicated. The applicant's or patent owner's reply must appear throughout to be a *bona fide* attempt to advance the

in support thereof.

**§ 1.115 [Removed and Reserved]**

47. Section 1.115 is removed and reserved.

48. Section 1.116 is amended by revising its heading and paragraph (a) to read as follows:

**§ 1.116 Amendments after final action or appeal.**

(a) After a final rejection or other final action (§ 1.113), amendments may be

amendment presenting the previously deleted matter as a new insertion.

(2) *Claims.* Amendments to the claims may only be made as follows:

(i) Instructions for insertions and deletions: A claim may be amended by specifying only the exact matter to be deleted or inserted by an amendment and the precise point where the deletion or insertion is to be made, where the changes are limited to:

(A) Deletions and/or

(B) The addition of no more than five (5) words in any one claim; or

(ii) Claim cancellation or rewriting: A claim may be amended by directions to cancel the claim or by rewriting such claim with underlining below the matter added and brackets around the matter deleted. The rewriting of a claim in this form will be construed as directing the deletion of the previous version of that claim. If a previously rewritten claim is again rewritten, underlining and bracketing will be applied relative to the previous version of the claim, with the parenthetical expression "twice amended," "three times amended," *etc.*, following the original claim number. The original claim number followed by that parenthetical expression must be used for the rewritten claim. No interlineations or deletions of any prior amendment may appear in the currently submitted version of the claim. A claim canceled by amendment (not deleted and rewritten) can be reinstated only by a subsequent amendment presenting the claim as a new claim with a new claim number.

(3) *Drawings.* (i) Amendments to the original application drawings are not permitted. Any change to the application drawings must be by way of a substitute sheet of drawings for each sheet changed submitted in compliance with § 1.84.

(ii) Where a change to the drawings is desired, a sketch in permanent ink showing proposed changes in red, to become part of the record, must be filed for approval by the examiner and should be in a separate paper.

(4) Any amendment to an application that is present in a substitute specification submitted pursuant to § 1.125 must be presented under the provisions of this paragraph either prior to or concurrent with submission of the substitute specification.

(5) The disclosure must be amended, when required by the Office, to correct inaccuracies of description and definition, and to secure substantial correspondence between the claims, the remainder of the specification, and the drawings.

(6) No amendment may introduce new matter into the disclosure of an application.

(b) *Amendments in reissue applications*: Amendments in reissue applications are made by filing a paper, in compliance with § 1.52, directing that specified amendments be made.

(1) *Specification other than the claims.* Amendments to the specification, other than to the claims, may only be made as follows:

(i) Amendments must be made by submission of the entire text of a newly added or rewritten paragraph(s) with markings pursuant to paragraph (b)(1)(iii) of this section, except that an entire paragraph may be deleted by a statement deleting the paragraph without presentation of the text of the paragraph.

(ii) The precise point in the specification must be indicated where the paragraph to be amended is located.

(iii) Underlining below the subject matter added to the patent and brackets around the subject matter deleted from the patent are to be used to mark the amendments being made.

(2) *Claims.* Amendments to the claims may only be made as follows:

(i)(A) The amendment must be made relative to the patent claims in accordance with paragraph (b)(6) of this section and must include the entire text of each claim which is being amended by the current amendment and of each claim being added by the current amendment with markings pursuant to paragraph (b)(2)(i)(C) of this section, except that a patent claim or added claim should be cancelled by a statement cancelling the patent claim or added claim without presentation of the text of the patent claim or added claim.

(B) Patent claims must not be renumbered and the numbering of any claims added to the patent must follow the number of the highest numbered patent claim.

(C) Underlining below the subject matter added to the patent and brackets around the subject matter deleted from the patent are to be used to mark the amendments being made. If a claim is amended pursuant to paragraph (b)(2)(i)(A) of this section, a parenthetical expression "amended," "twice amended," *etc.*, should follow the original claim number.

(ii) Each amendment submission must set forth the status (*i.e.*, pending or cancelled) as of the date of the amendment, of all patent claims and of all added claims.

(iii) Each amendment when originally submitted must be accompanied by an explanation of the support in the disclosure of the patent for the amendment along with any additional comments on page(s) separate from the page(s) containing the amendment.

(3) *Drawings.* (i) Amendments to the original patent drawings are not permitted. Any change to the patent drawings must be by way of a new sheet of drawings with the amended figures identified as "amended" and with added figures identified as "new" for each sheet changed submitted in compliance with § 1.84.

(ii) Where a change to the drawings is desired, a sketch in permanent ink showing proposed changes in red, to become part of the record, must be filed for approval by the examiner and should be in a separate paper.

(4) The disclosure must be amended, when required by the Office, to correct inaccuracies of description and definition, and to secure substantial correspondence between the claims, the remainder of the specification, and the drawings.

(5) No reissue patent shall be granted enlarging the scope of the claims of the original patent unless applied for within two years from the grant of the original patent, pursuant to 35 U.S.C. 251. No amendment to the patent may introduce new matter or be made in an expired patent.

(6) All amendments must be made relative to the patent specification, including the claims, and drawings, which is in effect as of the date of filing of the reissue application.

(c) *Amendments in reexamination proceedings:* Any proposed amendment to the description and claims in patents involved in reexamination proceedings must be made in accordance with § 1.530(d).

**§ 1.122 [Removed and reserved]**

53. Section 1.122 is removed and reserved.

**§ 1.123 [Removed and reserved]**

54. Section 1.123 is removed and reserved.

**§ 1.124 [Removed and reserved]**

55. Section 1.124 is removed and reserved.

56. Section 1.125 is revised to read as follows:

**§ 1.125 Substitute specification.**

(a) If the number or nature of the amendments or the legibility of the application papers renders it difficult to consider the application, or to arrange the papers for printing or copying, the Office may require the entire specification, including the claims, or any part thereof, be rewritten.

(b) A substitute specification, excluding the claims, may be filed at any point up to payment of the issue fee if it is accompanied by:

(1) A statement that the substitute specification includes no new matter; and

(2) A marked-up copy of the substitute specification showing the matter being added to and the matter being deleted from the specification of record.

(c) A substitute specification submitted under this section must be submitted in clean form without markings as to amended material.

new matter into the disclosure of an application.

(b) *Amendments in reissue applications*: Amendments in reissue applications are made by filing a paper, in compliance with § 1.52, directing that specified amendments be made.

(1) *Specification other than the claims.* Amendments to the specification, other than to the claims, may only be made as follows:

(i) Amendments must be made by submission of the entire text of a newly

comments on page(s) separate from the page(s) containing the amendment.

(3) *Drawings.* (i) Amendments to the original patent drawings are not permitted. Any change to the patent drawings must be by way of a new sheet of drawings with the amended figures identified as "amended" and with added figures identified as "new" for each sheet changed submitted in compliance with § 1.84.

(ii) Where a change to the drawings is desired, a sketch in permanent ink

if it is accompanied by:

(1) A statement that the substitute specification includes no new matter; and

(2) A marked-up copy of the substitute specification showing the matter being added to and the matter being deleted from the specification of record.

(c) A substitute specification submitted under this section must be submitted in clean form without markings as to amended material.

(d) A substitute specification under this section is not permitted in a reissue application or in a reexamination proceeding.

57. Section 1.126 is revised to read as follows:

**§ 1.126 Numbering of claims.**

The original numbering of the claims must be preserved throughout the prosecution. When claims are canceled the remaining claims must not be renumbered. When claims are added, they must be numbered by the applicant consecutively beginning with the number next following the highest numbered claim previously presented (whether entered or not). When the application is ready for allowance, the examiner, if necessary, will renumber the claims consecutively in the order in which they appear or in such order as may have been requested by applicant.

58. Section 1.133 is amended by revising paragraph (b) to read as follows:

**§ 1.133 Interviews.**

* * * * *

(b) In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office actions as specified in §§ 1.111 and 1.135.

## Subpart B—[Amended]

59. The undesignated center heading in Subpart B—National Processing Provisions, following § 1.133 is revised to read as follows:

### Time for Reply by Applicant; Abandonment of Application

60. Section 1.134 is revised to read as follows:

**§ 1.134 Time period for reply to an Office action.**

An Office action will notify the applicant of any non-statutory or shortened statutory time period set for reply to an Office action. Unless the applicant is notified in writing that a reply is required in less than six months, a maximum period of six months is allowed.

61. Section 1.135 is revised to read as follows:

**§ 1.135 Abandonment for failure to reply within time period.**

(a) If an applicant of a patent application fails to reply within the time period provided under § 1.134 and § 1.136, the application will become abandoned unless an Office action indicates otherwise.

(b) Prosecution of an application to save it from abandonment pursuant to paragraph (a) of this section must include such complete and proper reply as the condition of the application may require. The admission of, or refusal to admit, any amendment after final rejection or any amendment not responsive to the last action, or any related proceedings, will not operate to save the application from abandonment.

(c) When reply by the applicant is a *bona fide* attempt to advance the application to final action, and is substantially a complete reply to the non-final Office action, but consideration of some matter or compliance with some requirement has been inadvertently omitted, applicant may be given a new time period for reply under § 1.134 to supply the omission.

62. Section 1.136 is revised to read as follows:

**§ 1.136 Extensions of time**

(a)(1) If an applicant is required to reply within a nonstatutory or shortened statutory time period, applicant may extend the time period for reply up to the earlier of the expiration of any maximum period set by statute or five months after the time period set for reply, if a petition for an extension of time and the fee set in § 1.17(a) are filed, unless:

(i) Applicant is notified otherwise in an Office action;

(ii) The reply is a reply brief submitted pursuant to § 1.193(b);

(iii) The reply is a request for an oral hearing submitted pursuant to § 1.194(b);

(iv) The reply is to a decision by the Board of Patent Appeals and Interferences pursuant to § 1.196, § 1.197 or § 1.304; or

(v) The application is involved in an interference declared pursuant to § 1.611.

(2) The date on which the petition and the fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The expiration of the time period is determined by the amount of the fee paid. A reply must be filed prior to the expiration of the period of extension to avoid abandonment of the application (§ 1.135), but in no situation may an applicant reply later than the maximum time period set by statute, or be granted an extension of time under paragraph (b) of this section when the provisions of this paragraph are available. See § 1.136(b) for extensions of time relating to proceedings pursuant to §§ 1.193(b), 1.194, 1.196 or 1.197; § 1.304 for extension of time to appeal to the U.S. Court of Appeals for the Federal Circuit or to commence a civil action; § 1.550(c) for extension of time in reexamination proceedings; and § 1.645 for extension of time in interference proceedings.

(3) A written request may be submitted in an application that is an authorization to treat any concurrent or future reply, requiring a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. An authorization to charge all required fees, fees under § 1.17, or all required extension of time fees will be treated as a constructive petition for an extension of time in any concurrent or future reply requiring a petition for an extension of time under this paragraph for its timely submission. Submission of the fee set forth in § 1.17(a) will also be treated as a constructive petition for an extension of time in any concurrent reply requiring a petition for an extension of time under this paragraph for its timely submission.

(b) When a reply cannot be filed within the time period set for such reply and the provisions of paragraph (a) of this section are not available, the period for reply will be extended only for sufficient cause and for a reasonable time specified. Any request for an extension of time under this paragraph must be filed on or before the day on which such reply is due, but the mere filing of such a request will not effect any extension under this paragraph. In no situation can any extension carry the date on which reply is due beyond the maximum time period set by statute. See § 1.304 for extension of time to appeal to the U.S. Court of Appeals for the Federal Circuit or to commence a civil action; § 1.645 for extension of time in interference proceedings; and § 1.550(c) for extension of time in reexamination proceedings.

63. Section 1.137 is revised to read as follows:

**§ 1.137 Revival of abandoned application or lapsed patent.**

(a) *Unavoidable.* Where the delay in reply was unavoidable, a petition may be filed to revive an abandoned application or a lapsed patent pursuant to this paragraph. A grantable petition pursuant to this paragraph must be accompanied by:

(1) The required reply, unless previously filed. In a nonprovisional application abandoned for failure to prosecute, the required reply may be met by the filing of a continuing

applicant is notified in writing that a reply is required in less than six months, a maximum period of six months is allowed.

61. Section 1.135 is revised to read as follows:

§ 1.135 Abandonment for failure to reply within time period.

(a) If an applicant of a patent application fails to reply within the time period provided under § 1.134 and § 1.136, the application will become

time period is determined by the amount of the fee paid. A reply must be filed prior to the expiration of the period of extension to avoid abandonment of the application (§ 1.135), but in no situation may an applicant reply later than the maximum time period set by statute, or be granted an extension of time under paragraph (b) of this section when the provisions of this paragraph are available. See § 1.136(b) for extensions of time relating

(a) *Unavoidable.* Where the delay in reply was unavoidable, a petition may be filed to revive an abandoned application or a lapsed patent pursuant to this paragraph. A grantable petition pursuant to this paragraph must be accompanied by:

(1) The required reply, unless previously filed. In a nonprovisional application abandoned for failure to prosecute, the required reply may be met by the filing of a continuing

application. In an application or patent, abandoned or lapsed for failure to pay the issue fee or any portion thereof, the required reply must be the payment of the issue fee or any outstanding balance thereof;

(2) The petition fee as set forth in § 1.17(l);

(3) A showing to the satisfaction of the Commissioner that the entire delay in filing the required reply from the due date for the reply until the filing of a grantable petition pursuant to this paragraph was unavoidable; and

(4) Any terminal disclaimer (and fee as set forth in § 1.20(d)) required pursuant to paragraph (c) of this section.

(b) *Unintentional.* Where the delay in reply was unintentional, a petition may be filed to revive an abandoned application or a lapsed patent pursuant to this paragraph. A grantable petition pursuant to this paragraph must be accompanied by:

(1) The required reply, unless previously filed. In a nonprovisional application abandoned for failure to prosecute, the required reply may be met by the filing of a continuing application. In an application or patent, abandoned or lapsed for failure to pay the issue fee or any portion thereof, the required reply must be the payment of the issue fee or any outstanding balance thereof;

(2) The petition fee as set forth in § 1.17(m);

(3) A statement that the entire delay in filing the required reply from the due date for the reply until the filing of a grantable petition pursuant to this paragraph was unintentional. The Commissioner may require additional information where there is a question whether the delay was unintentional; and

(4) Any terminal disclaimer (and fee as set forth in § 1.20(d)) required pursuant to paragraph (c) of this section.

(c) In a design application, a utility application filed before June 8, 1995, or a plant application filed before June 8, 1995, any petition to revive pursuant to this section must be accompanied by a terminal disclaimer and fee as set forth in § 1.321 dedicating to the public a terminal part of the term of any patent granted thereon equivalent to the period of abandonment of the application. Any terminal disclaimer pursuant to this paragraph must also apply to any patent granted on any continuing application that contains a specific reference under 35 U.S.C. 120, 121, or 365(c) to the application for which revival is sought. The provisions of this paragraph do not apply to lapsed patents.

(d) Any request for reconsideration or review of a decision refusing to revive an abandoned application or lapsed patent upon petition filed pursuant to this section, to be considered timely, must be filed within two months of the decision refusing to revive or within such time as set in the decision. Unless a decision indicates otherwise, this time period may be extended under the provisions of § 1.136.

(e) A provisional application, abandoned for failure to timely respond to an Office requirement, may be revived pursuant to this section so as to be pending for a period of no longer than twelve months from its filing date. Under no circumstances will a provisional application be regarded as pending after twelve months from its filing date.

**§ 1.139 [Removed and reserved]**

64. Section 1.139 is removed and reserved.

65. Section 1.142 is amended by revising paragraph (a) to read as follows:

**§ 1.142 Requirement for restriction.**

(a) If two or more independent and distinct inventions are claimed in a single application, the examiner in an Office action will require the applicant in the reply to that action to elect an invention to which the claims will be restricted, this official action being called a requirement for restriction (also known as a requirement for division). Such requirement will normally be made before any action on the merits; however, it may be made at any time before final action.

* * * * *

66. Section 1.144 is revised to read as follows:

**§ 1.144 Petition from requirement for restriction.**

After a final requirement for restriction, the applicant, in addition to making any reply due on the remainder of the action, may petition the Commissioner to review the requirement. Petition may be deferred until after final action on or allowance of claims to the invention elected, but must be filed not later than appeal. A petition will not be considered if reconsideration of the requirement was not requested (see § 1.181).

67. Section 1.146 is revised to read as follows:

**§ 1.146 Election of species.**

In the first action on an application containing a generic claim to a generic invention (genus) and claims to more than one patentably distinct species embraced thereby, the examiner may require the applicant in the reply to that action to elect a species of his or her invention to which his or her claim will be restricted if no claim to the genus is found to be allowable. However, if such application contains claims directed to more than a reasonable number of species, the examiner may require restriction of the claims to not more than a reasonable number of species before taking further action in the application.

68. Section 1.152 is revised to read as follows:

**§ 1.152 Design drawings.**

(a) The design must be represented by a drawing that complies with the requirements of § 1.84, and must contain a sufficient number of views to constitute a complete disclosure of the appearance of the design.

(1) Appropriate and adequate surface shading should be used to show the character or contour of the surfaces represented. Solid black surface shading is not permitted except when used to represent the color black as well as color contrast. Broken lines may be used to show visible environmental structure, but may not be used to show hidden planes and surfaces which cannot be seen through opaque materials. Alternate positions of a design component, illustrated by full and broken lines in the same view are not permitted in a design drawing.

(2) Color photographs and color drawings are not permitted in design applications in the absence of a grantable petition pursuant to § 1.84(a)(2). Photographs and ink drawings are not permitted to be combined as formal drawings in one application. Photographs submitted in lieu of ink drawings in design patent applications must comply with § 1.84(b) and must not disclose environmental structure but must be limited to the design for the article claimed.

(b) Any detail shown in the ink or color drawings or photographs (formal or informal) deposited with the original application papers constitutes an integral part of the disclosed and claimed design, except as otherwise provided in this paragraph. This detail may include, but is not limited to, color or contrast, graphic or written indicia, including identifying indicia of a proprietary nature, surface ornamentation on an article, or any combination thereof.

(1) When any detail shown in informal drawings or photographs does not constitute an integral part of the disclosed and claimed design, a specific disclaimer must appear in the original application papers either in the specification or directly on the drawings or photographs. This specific disclaimer

terminal part of the term of any patent granted thereon equivalent to the period of abandonment of the application. Any terminal disclaimer pursuant to this paragraph must also apply to any patent granted on any continuing application that contains a specific reference under 35 U.S.C. 120, 121, or 365(c) to the application for which revival is sought. The provisions of this paragraph do not apply to lapsed patents.

(d) Any request for reconsideration or review of a decision refusing to revive

reconsideration of the requirement was not requested (see § 1.181).

67. Section 1.146 is revised to read as follows:

**§ 1.146 Election of species.**

In the first action on an application containing a generic claim to a generic invention (genus) and claims to more than one patentably distinct species embraced thereby, the examiner may require the applicant in the reply to that action to elect a species of his or her

of contrast, graphic or written indicia, including identifying indicia of a proprietary nature, surface ornamentation on an article, or any combination thereof.

(1) When any detail shown in informal drawings or photographs does not constitute an integral part of the disclosed and claimed design, a specific disclaimer must appear in the original application papers either in the specification or directly on the drawings or photographs. This specific disclaimer

in the original application papers will provide antecedent basis for the omission of the disclaimed detail(s) in later-filed drawings or photographs.

(2) When informal color drawings or photographs are deposited with the original application papers without a disclaimer pursuant to paragraph (b)(1) of this section, formal color drawings or photographs, or a black and white drawing lined to represent color, will be required.

69. Section 1.154 is amended by revising its heading and paragraph (a)(3) as to read follows:

**§ 1.154 Arrangement of application elements.**

(a) * * *

(3) Preamble, stating name of the applicant, title of the design, and a brief description of the nature and intended use of the article in which the design is embodied.

* * * * *

70. Section 1.155 is revised to read as follows:

**§ 1.155 Issue of design patents.**

If, on examination, it appears that the applicant is entitled to a design patent under the law, a notice of allowance will be sent to the applicant, or applicant's attorney or agent, calling for the payment of the issue fee (§ 1.18(b)). If this issue fee is not paid within three months of the date of the notice of allowance, the application shall be regarded as abandoned.

71. Section 1.163 is amended by revising its heading and paragraph (b) to read as follows:

**§ 1.163 Specification and arrangement of application elements.**

* * * * *

(b) Two copies of the specification (including the claim) must be submitted, but only one signed oath or declaration is required.

* * * * *

72. Section 1.167 is revised to read as follows:

**§ 1.167 Examination.**

Applications may be submitted by the Patent and Trademark Office to the Department of Agriculture for study and report.

73. Section 1.171 is revised to read as follows:

**§ 1.171 Application for reissue.**

An application for reissue must contain the same parts required for an application for an original patent, complying with all the rules relating thereto except as otherwise provided, and in addition, must comply with the requirements of the rules relating to reissue applications.

74. Section 1.172 is amended by revising paragraph (a) to read as follows:

**§ 1.172 Applicants, assignees.**

(a) A reissue oath must be signed and sworn to or declaration made by the inventor or inventors except as otherwise provided (see §§ 1.42, 1.43, 1.47), and must be accompanied by the written consent of all assignees, if any, owning an undivided interest in the patent, but a reissue oath may be made and sworn to or declaration made by the assignee of the entire interest if the application does not seek to enlarge the scope of the claims of the original patent. All assignees consenting to the reissue must establish their ownership interest in the patent by filing in the reissue application a submission in accordance with the provisions of § 3.73(b) of this chapter.

* * * * *

75. Section 1.175 is revised to read as follows:

**§ 1.175 Reissue oath or declaration.**

(a) The reissue oath or declaration in addition to complying with the requirements of § 1.63, must also state that:

(1) The applicant believes the original patent to be wholly or partly inoperative or invalid by reason of a defective specification or drawing, or by reason of the patentee claiming more or less than the patentee had the right to claim in the patent, stating at least one error being relied upon as the basis for reissue; and

(2) All errors being corrected in the reissue application up to the time of filing of the oath or declaration under this paragraph arose without any deceptive intention on the part of the applicant.

(b)(1) For any error corrected, which is not covered by the oath or declaration submitted under paragraph (a) of this section, applicant must submit a supplemental oath or declaration stating that every such error arose without any deceptive intention on the part of the applicant. Any supplemental oath or declaration required by this paragraph must be submitted before allowance and may be submitted:

(i) With any amendment prior to allowance; or

(ii) In order to overcome a rejection under 35 U.S.C. 251 made by the examiner where it is indicated that the submission of a supplemental oath or declaration as required by this paragraph will overcome the rejection.

(2) For any error sought to be corrected after allowance, a supplemental oath or declaration must accompany the requested correction stating that the error(s) to be corrected arose without any deceptive intention on the part of the applicant.

(c) Having once stated an error upon which the reissue is based, as set forth in paragraph (a)(1), unless all errors previously stated in the oath or declaration are no longer being corrected, a subsequent oath or declaration under paragraph (b) of this section need not specifically identify any other error or errors being corrected.

(d) The oath or declaration required by paragraph (a) of this section may be submitted under the provisions of § 1.53(f).

76. Section 1.182 is revised to read as follows:

**§ 1.182 Questions not specifically provided for.**

All situations not specifically provided for in the regulations of this part will be decided in accordance with the merits of each situation by or under the authority of the Commissioner, subject to such other requirements as may be imposed, and such decision will be communicated to the interested parties in writing. Any petition seeking a decision under this section must be accompanied by the petition fee set forth in § 1.17(h).

77. Section 1.184 is removed and reserved.

**§ 1.184 [Removed and reserved]**

78. Section 1.191 is amended by revising paragraphs (a) and (b) to read as follows:

**§ 1.191 Appeal to Board of Patent Appeals and Interferences.**

(a) Every applicant for a patent or for reissue of a patent, and every owner of a patent under reexamination, any of whose claims has been twice or finally (§ 1.113) rejected, may appeal from the decision of the examiner to the Board of Patent Appeals and Interferences by filing a notice of appeal and the fee set forth in § 1.17(b) within the time period provided under §§ 1.134 and 1.136 for reply.

(b) The signature requirement of § 1.33 does not apply to a notice of appeal filed under this section.

* * * * *

79. Section 1.192 is amended by revising paragraph (a) to read as follows:

**§ 1.192 Appellant's brief.**

(a) Appellant must, within two months from the date of the notice of appeal under § 1.191 or within the time allowed for reply to the action from which the appeal was taken, if such

Patent and Trademark Office to the Department of Agriculture for study and report.

73. Section 1.171 is revised to read as follows:

**§ 1.171 Application for reissue.**

An application for reissue must contain the same parts required for an application for an original patent, complying with all the rules relating thereto except as otherwise provided, and in addition, must comply with the

declaration required by this paragraph must be submitted before allowance and may be submitted:

(i) With any amendment prior to allowance; or

(ii) In order to overcome a rejection under 35 U.S.C. 251 made by the examiner where it is indicated that the submission of a supplemental oath or declaration as required by this paragraph will overcome the rejection.

(2) For any error sought to be corrected after allowance, a

§ 1.33 does not apply to a notice of appeal filed under this section.

* * * * *

79. Section 1.192 is amended by revising paragraph (a) to read as follows:

**§ 1.192 Appellant's brief.**

(a) Appellant must, within two months from the date of the notice of appeal under § 1.191 or within the time allowed for reply to the action from which the appeal was taken, if such

time is later, file a brief in triplicate. The brief must be accompanied by the fee set forth in § 1.17(c) and must set forth the authorities and arguments on which appellant will rely to maintain the appeal. Any arguments or authorities not included in the brief will be refused consideration by the Board of Patent Appeals and Interferences, unless good cause is shown.

* * * * *

80. Section 1.193 is revised to read as follows:

**§ 1.193 Examiner's answer and reply brief.**

(a) (1) The primary examiner may, within such time as may be directed by the Commissioner, furnish a written statement in answer to appellant's brief including such explanation of the invention claimed and of the references and grounds of rejection as may be necessary, supplying a copy to appellant. If the primary examiner finds that the appeal is not regular in form or does not relate to an appealable action, the primary examiner shall so state.

(2) An examiner's answer must not include a new ground of rejection, but if an amendment under § 1.116 proposes to add or amend one or more claims and appellant was advised that the amendment under § 1.116 would be entered for purposes of appeal and which individual rejection(s) set forth in the action from which the appeal was taken would be used to reject the added or amended claim(s), then the appeal brief must address the rejection(s) of the claim(s) added or amended by the amendment under § 1.116 as appellant was so advised and the examiner's answer may include the rejection(s) of the claim(s) added or amended by the amendment under § 1.116 as appellant was so advised. The filing of an amendment under § 1.116 which is entered for purposes of appeal represents appellant's consent that when so advised any appeal proceed on those claim(s) added or amended by the amendment under § 1.116 subject to any rejection set forth in the action from which the appeal was taken.

(b) (1) Appellant may file a reply brief to an examiner's answer within two months from the date of such examiner's answer. See § 1.136(b) for extensions of time for filing a reply brief in a patent application and § 1.550(c) for extensions of time for filing a reply brief in a reexamination proceeding. The primary examiner must either acknowledge receipt and entry of the reply brief or withdraw the final rejection and reopen prosecution to respond to the reply brief. A supplemental examiner's answer is not permitted, unless the application has been remanded by the Board of Patent Appeals and Interferences for such purpose.

(2) Where prosecution is reopened by the primary examiner after an appeal or reply brief has been filed, appellant must exercise one of the following two options to avoid abandonment of the application:

(i) File a reply under § 1.111, if the Office action is not final, or a reply under § 1.113, if the Office action is final; or

(ii) Request reinstatement of the appeal. If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (§§ 1.130, 1.131 or 1.132) or other evidence are permitted.

81. Section 1.194 is revised to read as follows:

**§ 1.194 Oral hearing.**

(a) An oral hearing should be requested only in those circumstances in which appellant considers such a hearing necessary or desirable for a proper presentation of the appeal. An appeal decided without an oral hearing will receive the same consideration by the Board of Patent Appeals and Interferences as appeals decided after oral hearing.

(b) If appellant desires an oral hearing, appellant must file, in a separate paper, a written request for such hearing accompanied by the fee set forth in § 1.17(d) within two months from the date of the examiner's answer. If appellant requests an oral hearing and submits therewith the fee set forth in § 1.17(d), an oral argument may be presented by, or on behalf of, the primary examiner if considered desirable by either the primary examiner or the Board. See § 1.136(b) for extensions of time for requesting an oral hearing in a patent application and § 1.550(c) for extensions of time for requesting an oral hearing in a reexamination proceeding.

(c) If no request and fee for oral hearing have been timely filed by appellant, the appeal will be assigned for consideration and decision. If appellant has requested an oral hearing and has submitted the fee set forth in § 1.17(d), a day of hearing will be set, and due notice thereof given to appellant and to the primary examiner. A hearing will be held as stated in the notice, and oral argument will be limited to twenty minutes for appellant and fifteen minutes for the primary examiner unless otherwise ordered before the hearing begins. If the Board decides that a hearing is not necessary, the Board will so notify appellant.

82. Section 1.196 is amended by revising paragraphs (b) and (d) to read as follows:

**§ 1.196 Decision by the Board of Patent Appeals and Interferences.**

* * * * *

(b) Should the Board of Patent Appeals and Interferences have knowledge of any grounds not involved in the appeal for rejecting any pending claim, it may include in the decision a statement to that effect with its reasons for so holding, which statement constitutes a new ground of rejection of the claim. A new ground of rejection shall not be considered final for purposes of judicial review. When the Board of Patent Appeals and Interferences makes a new ground of rejection, the appellant, within two months from the date of the decision, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of proceedings (§ 1.197(c)) as to the rejected claims:

(1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. The new ground of rejection is binding upon the examiner unless an amendment or showing of facts not previously of record be made which, in the opinion of the examiner, overcomes the new ground of rejection stated in the decision. Should the examiner reject the claims, appellant may again appeal pursuant to §§ 1.191 through 1.195 to the Board of Patent Appeals and Interferences.

(2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. The request for rehearing must address the new ground of rejection and state with particularity the points believed to have been misapprehended or overlooked in rendering the decision and also state all other grounds upon which rehearing is sought. Where request for such rehearing is made, the Board of Patent Appeals and Interferences shall rehear the new ground of rejection and, if necessary, render a new decision which shall include all grounds of rejection upon which a patent is refused. The decision on rehearing is deemed to incorporate the earlier decision for purposes of appeal, except for those portions specifically withdrawn on rehearing, and is final for the purpose of judicial review, except when noted otherwise in the decision.

* * * * *

examiner's answer. See § 1.136(b) for extensions of time for filing a reply brief in a patent application and § 1.550(c) for extensions of time for filing a reply brief in a reexamination proceeding. The primary examiner must either acknowledge receipt and entry of the reply brief or withdraw the final rejection and reopen prosecution to respond to the reply brief. A supplemental examiner's answer is not permitted, unless the application has

and has submitted the fee set forth in § 1.17(d), a day of hearing will be set, and due notice thereof given to appellant and to the primary examiner. A hearing will be held as stated in the notice, and oral argument will be limited to twenty minutes for appellant and fifteen minutes for the primary examiner unless otherwise ordered before the hearing begins. If the Board decides that a hearing is not necessary, the Board will so notify appellant.

the new ground of rejection and, if necessary, render a new decision which shall include all grounds of rejection upon which a patent is refused. The decision on rehearing is deemed to incorporate the earlier decision for purposes of appeal, except for those portions specifically withdrawn on rehearing, and is final for the purpose of judicial review, except when noted otherwise in the decision.

* * * * *

(d) The Board of Patent Appeals and Interferences may require appellant to address any matter that is deemed appropriate for a reasoned decision on the pending appeal. Appellant will be given a non-extendable time period within which to respond to such a requirement.

* * * * *

83. Section 1.197 is amended by revising paragraphs (a) and (b) to read as follows:

**§ 1.197 Action following decision.**

(a) After decision by the Board of Patent Appeals and Interferences, the application will be returned to the examiner, subject to appellant's right of appeal or other review, for such further action by appellant or by the examiner, as the condition of the application may require, to carry into effect the decision.

(b) Appellant may file a single request for rehearing within two months from the date of the original decision, unless the original decision is so modified by the decision on rehearing as to become, in effect, a new decision, and the Board of Patent Appeals and Interferences so states. The request for rehearing must state with particularity the points believed to have been misapprehended or overlooked in rendering the decision and also state all other grounds upon which rehearing is sought. See § 1.136(b) for extensions of time for seeking rehearing in a patent application and § 1.550(c) for extensions of time for seeking rehearing in a reexamination proceeding.

* * * * *

84. Section 1.291 is amended by revising paragraph (c) to read as follows:

**§ 1.291 Protests by the public against pending applications.**

* * * * *

(c) A member of the public filing a protest in an application under paragraph (a) of this section will not receive any communications from the Office relating to the protest, other than the return of a self-addressed postcard which the member of the public may include with the protest in order to receive an acknowledgment by the Office that the protest has been received. In the absence of a request by the Office, an applicant has no duty to, and need not, reply to a protest. The limited involvement of the member of the public filing a protest pursuant to paragraph (a) of this section ends with the filing of the protest, and no further submission on behalf of the protestor will be considered, except for additional prior art, or unless such submission raises new issues which could not have been earlier presented.

85. Section 1.293 is amended by revising paragraph (c) to read as follows:

**§ 1.293 Statutory invention registration.**

* * * * *

(c) A waiver filed with a request for a statutory invention registration will be effective, upon publication of the statutory invention registration, to waive the inventor's right to receive a patent on the invention claimed in the statutory invention registration, in any application for an original patent which is pending on, or filed after, the date of publication of the statutory invention registration. A waiver filed with a request for a statutory invention registration will not affect the rights of any other inventor even if the subject matter of the statutory invention registration and an application of another inventor are commonly owned. A waiver filed with a request for a statutory invention registration will not affect any rights in a patent to the inventor which issued prior to the date of publication of the statutory invention registration unless a reissue application is filed seeking to enlarge the scope of the claims of the patent. See also § 1.104(c)(5).

86. Section 1.294 is amended by revising paragraph (b) to read as follows:

**§ 1.294 Examination of request for publication of a statutory invention registration and patent application to which the request is directed.**

* * * * *

(b) Applicant will be notified of the results of the examination set forth in paragraph (a) of this section. If the requirements of § 1.293 and this section are not met by the request filed, the notification to applicant will set a period of time within which to comply with the requirements in order to avoid abandonment of the application. If the application does not meet the requirements of 35 U.S.C. 112, the notification to applicant will include a rejection under the appropriate provisions of 35 U.S.C. 112. The periods for reply established pursuant to this section are subject to the extension of time provisions of § 1.136. After reply by the applicant, the application will again be considered for publication of a statutory invention registration. If the requirements of § 1.293 and this section are not timely met, the refusal to publish will be made final. If the requirements of 35 U.S.C. 112 are not met, the rejection pursuant to 35 U.S.C. 112 will be made final.

* * * * *

87. Section 1.304 is amended by revising paragraph (a)(1) to read as follows:

**§ 1.304 Time for appeal or civil action.**

(a)(1) The time for filing the notice of appeal to the U.S. Court of Appeals for the Federal Circuit (§ 1.302) or for commencing a civil action (§ 1.303) is two months from the date of the decision of the Board of Patent Appeals and Interferences. If a request for rehearing or reconsideration of the decision is filed within the time period provided under § 1.197(b) or § 1.658(b), the time for filing an appeal or commencing a civil action shall expire two months after action on the request. In interferences, the time for filing a cross-appeal or cross-action expires:

(i) 14 days after service of the notice of appeal or the summons and complaint; or

(ii) Two months after the date of decision of the Board of Patent Appeals and Interferences, whichever is later.

* * * * *

88. Section 1.312 is amended by revising paragraph (b) to read as follows:

**§ 1.312 Amendments after allowance.**

* * * * *

(b) Any amendment pursuant to paragraph (a) of this section filed after the date the issue fee is paid must be accompanied by a petition including the fee set forth in § 1.17(i) and a showing of good and sufficient reasons why the amendment is necessary and was not earlier presented. For reissue applications, see § 1.175(b), which requires a supplemental oath or declaration to accompany the amendment.

89. Section 1.316 is revised to read as follows:

**§ 1.316 Application abandoned for failure to pay issue fee.**

If the issue fee is not paid within three months from the date of the notice of allowance, the application will be regarded as abandoned. Such an abandoned application will not be considered as pending before the Patent and Trademark Office.

90. Section 1.317 is revised to read as follows:

**§ 1.317 Lapsed patents; delayed payment of balance of issue fee.**

If the issue fee paid is the amount specified in the notice of allowance, but a higher amount is required at the time the issue fee is paid, any remaining balance of the issue fee is to be paid within three months from the date of notice thereof and, if not paid, the patent will lapse at the termination of the three-month period.

**§ 1.318 [Removed and reserved]**

91. Section 1.318 is removed and reserved.

received. In the absence of a request by the Office, an applicant has no duty to, and need not, reply to a protest. The limited involvement of the member of the public filing a protest pursuant to paragraph (a) of this section ends with the filing of the protest, and no further submission on behalf of the protestor will be considered, except for additional prior art, or unless such submission raises new issues which could not have been earlier presented.

again be considered for publication of a statutory invention registration. If the requirements of § 1.293 and this section are not timely met, the refusal to publish will be made final. If the requirements of 35 U.S.C. 112 are not met, the rejection pursuant to 35 U.S.C. 112 will be made final.

* * * * *

87. Section 1.304 is amended by revising paragraph (a)(1) to read as follows:

specified in the notice of allowance, but a higher amount is required at the time the issue fee is paid, any remaining balance of the issue fee is to be paid within three months from the date of notice thereof and, if not paid, the patent will lapse at the termination of the three-month period.

**§ 1.318 [Removed and reserved]**

91. Section 1.318 is removed and reserved.

92. Section 1.324 is revised to read as follows:

**§ 1.324 Correction of inventorship in patent.**

(a) Whenever through error a person is named in an issued patent as the inventor, or through error an inventor is not named in an issued patent and such error arose without any deceptive intention on his or her part, the Commissioner may, on petition, or on order of a court before which such matter is called in question, issue a certificate naming only the actual inventor or inventors. A petition to correct inventorship of a patent involved in an interference must comply with the requirements of this section and must be accompanied by a motion under § 1.634.

(b) Any petition pursuant to paragraph (a) of this section must be accompanied by:

(1) A statement from each person who is being added as an inventor and from each person who is being deleted as an inventor that the inventorship error occurred without any deceptive intention on his or her part;

(2) A statement from the current named inventors who have not submitted a statement under paragraph (b)(1) of this section either agreeing to the change of inventorship or stating that they have no disagreement in regard to the requested change;

(3) A statement from all assignees of the parties submitting a statement under paragraphs (b)(1) and (b)(2) of this section agreeing to the change of inventorship in the patent, which statement must comply with the requirements of § 3.73(b) of this chapter; and

(4) The fee set forth in § 1.20(b).

**§ 1.352 [Removed and reserved]**

93. Section 1.352 is removed and reserved.

94. Section 1.366 is amended by revising paragraphs (b) through (d) to read as follows:

**§ 1.366 Submission of maintenance fees.**

* * * * *

(b) A maintenance fee and any necessary surcharge submitted for a patent must be submitted in the amount due on the date the maintenance fee and any necessary surcharge are paid. A maintenance fee or surcharge may be paid in the manner set forth in § 1.23 or by an authorization to charge a deposit account established pursuant to § 1.25. Payment of a maintenance fee and any necessary surcharge or the authorization to charge a deposit account must be submitted within the periods set forth in § 1.362 (d), (e), or (f). Any payment or authorization of maintenance fees and surcharges filed at any other time will not be accepted and will not serve as a payment of the maintenance fee except insofar as a delayed payment of the maintenance fee is accepted by the Commissioner in an expired patent pursuant to a petition filed under § 1.378. Any authorization to charge a deposit account must authorize the immediate charging of the maintenance fee and any necessary surcharge to the deposit account. Payment of less than the required amount, payment in a manner other than that set forth § 1.23, or in the filing of an authorization to charge a deposit account having insufficient funds will not constitute payment of a maintenance fee or surcharge on a patent. The procedures set forth in § 1.8 or § 1.10 may be utilized in paying maintenance fees and any necessary surcharges.

(c) In submitting maintenance fees and any necessary surcharges, identification of the patents for which maintenance fees are being paid must include the following:

(1) The patent number; and

(2) The application number of the United States application for the patent on which the maintenance fee is being paid.

(d) Payment of maintenance fees and any surcharges should identify the fee being paid for each patent as to whether it is the 3½-, 7½-, or 11½-year fee, whether small entity status is being changed or claimed, the amount of the maintenance fee and any surcharge being paid, and any assigned customer number. If the maintenance fee and any necessary surcharge is being paid on a reissue patent, the payment must identify the reissue patent by reissue patent number and reissue application number as required by paragraph (c) of this section and should also include the original patent number.

* * * * *

95. Section 1.377 is amended by revising paragraph (c) to read as follows:

**§ 1.377 Review of decision refusing to accept and record payment of a maintenance fee filed prior to expiration of patent.**

* * * * *

(c) Any petition filed under this section must comply with the requirements of § 1.181(b) and must be signed by an attorney or agent registered to practice before the Patent and Trademark Office, or by the patentee, the assignee, or other party in interest.

96. Section 1.378 is amended by revising paragraph (d) to read as follows:

**§ 1.378 Acceptance of delayed payment of maintenance fee in expired patent to reinstate patent.**

* * * * *

(d) Any petition under this section must be signed by an attorney or agent registered to practice before the Patent and Trademark Office, or by the patentee, the assignee, or other party in interest.

* * * * *

97. Section 1.425 is revised to read as follows:

**§ 1.425 Filing by other than inventor.**

Where an international application which designates the United States of America is filed and where one or more inventors refuse to sign the Request for the international application or cannot be found or reached after diligent effort, the Request need not be signed by such inventor if it is signed by another applicant. Such international application must be accompanied by a statement explaining to the satisfaction of the Commissioner the lack of the signature concerned.

98. Section 1.484 is amended by revising paragraphs (d) through (f) to read as follows:

**§ 1.484 Conduct of international preliminary examination.**

* * * * *

(d) The International Preliminary Examining Authority will establish a written opinion if any defect exists or if the claimed invention lacks novelty, inventive step or industrial applicability and will set a non-extendable time limit in the written opinion for the applicant to reply.

(e) If no written opinion under paragraph (d) of this section is necessary, or after any written opinion and the reply thereto or the expiration of the time limit for reply to such written opinion, an international preliminary examination report will be established by the International Preliminary Examining Authority. One copy will be submitted to the International Bureau and one copy will be submitted to the applicant.

(f) An applicant will be permitted a personal or telephone interview with the examiner, which must be conducted during the non-extendable time limit for reply by the applicant to a written opinion. Additional interviews may be conducted where the examiner determines that such additional interviews may be helpful to advancing the international preliminary examination procedure. A summary of any such personal or telephone interview must be filed by the applicant as a part of the reply to the written

necessary surcharge submitted for a patent must be submitted in the amount due on the date the maintenance fee and any necessary surcharge are paid. A maintenance fee or surcharge may be paid in the manner set forth in § 1.23 or by an authorization to charge a deposit account established pursuant to § 1.25. Payment of a maintenance fee and any necessary surcharge or the authorization to charge a deposit account must be submitted within the periods set forth in

patent.

* * * * *

(c) Any petition filed under this section must comply with the requirements of § 1.181(b) and must be signed by an attorney or agent registered to practice before the Patent and Trademark Office, or by the patentee, the assignee, or other party in interest.

96. Section 1.378 is amended by revising paragraph (d) to read as follows:

the examiner, which must be conducted during the non-extendable time limit for reply by the applicant to a written opinion. Additional interviews may be conducted where the examiner determines that such additional interviews may be helpful to advancing the international preliminary examination procedure. A summary of any such personal or telephone interview must be filed by the applicant as a part of the reply to the written

opinion or, if applicant files no reply, be made of record in the file by the examiner.

99. Section 1.485 is amended by revising paragraph (a) to read as follows:

**§ 1.485 Amendments by applicant during international preliminary examination.**

(a) The applicant may make amendments at the time of filing of the Demand and within the time limit set by the International Preliminary Examining Authority for reply to any notification under § 1.484(b) or to any written opinion. Any such amendments must:

(1) Be made by submitting a replacement sheet for every sheet of the application which differs from the sheet it replaces unless an entire sheet is cancelled; and

(2) Include a description of how the replacement sheet differs from the replaced sheet.

* * * * *

100. Section 1.488 is amended by revising paragraph (b)(3) to read as follows:

**§ 1.488 Determination of unity of invention before the International Preliminary Examining Authority.**

* * * * *

(b) * * *

(3) If applicant fails to restrict the claims or pay additional fees within the time limit set for reply, the International Preliminary Examining Authority will issue a written opinion and/or establish an international preliminary examination report on the main invention and shall indicate the relevant facts in the said report. In case of any doubt as to which invention is the main invention, the invention first mentioned in the claims and previously searched by an International Searching Authority shall be considered the main invention.

* * * * *

101. Section 1.492 is amended by adding a new paragraph (g) to read as follows:

**§ 1.492 National stage fees.**

* * * * *

(g) If the additional fees required by paragraphs (b), (c), and (d) of this section are not paid on presentation of the claims for which the additional fees are due, they must be paid or the claims cancelled by amendment, prior to the expiration of the time period set for reply by the Office in any notice of fee deficiency.

102. Section 1.494 is amended by revising paragraph (c) to read as follows:

**§ 1.494 Entering the national stage in the United States of America as a Designated Office.**

* * * * *

(c) If applicant complies with paragraph (b) of this section before expiration of 20 months from the priority date but omits:

(1) A translation of the international application, as filed, into the English language, if it was originally filed in another language (35 U.S.C. 371(c)(2)); and/or

(2) The oath or declaration of the inventor (35 U.S.C. 371(c)(4); see § 1.497), applicant will be so notified and given a period of time within which to file the translation and/or oath or declaration in order to prevent abandonment of the application. The payment of the processing fee set forth in § 1.492(f) is required for acceptance of an English translation later than the expiration of 20 months after the priority date. The payment of the surcharge set forth in § 1.492(e) is required for acceptance of the oath or declaration of the inventor later than the expiration of 20 months after the priority date. A copy of the notification mailed to applicant should accompany any reply thereto submitted to the Office.

* * * * *

103. Section 1.495 is amended by revising paragraph (c) to read as follows:

**§ 1.495 Entering the national stage in the United States of America as an Elected Office.**

* * * * *

(c) If applicant complies with paragraph (b) of this section before expiration of 30 months from the priority date but omits:

(1) A translation of the international application, as filed, into the English language, if it was originally filed in another language (35 U.S.C. 371(c)(2)); and/or

(2) The oath or declaration of the inventor (35 U.S.C. 371(c)(4); see § 1.497), applicant will be so notified and given a period of time within which to file the translation and/or oath or declaration in order to prevent abandonment of the application. The payment of the processing fee set forth in § 1.492(f) is required for acceptance of an English translation later than the expiration of 30 months after the priority date. The payment of the surcharge set forth in § 1.492(e) is required for acceptance of the oath or declaration of the inventor later than the expiration of 30 months after the priority date. A copy of the notification mailed to applicant should accompany any reply thereto submitted to the Office.

* * * * *

104. Section 1.510 is amended by revising paragraph (e) to read as follows:

**§ 1.510 Request for reexamination.**

* * * * *

(e) A request filed by the patent owner may include a proposed amendment in accordance with § 1.530(d).

* * * * *

105. Section 1.530 is amended by removing paragraph (e) and revising the section heading and paragraph (d) to read as follows:

**§ 1.530 Statement; amendment by patent owner.**

* * * * *

(d) *Amendments in reexamination proceedings.* Amendments in reexamination proceedings are made by filing a paper, in compliance with paragraph (d)(5) of this section, directing that specified amendments be made.

(1) *Specification other than the claims.* Amendments to the specification, other than to the claims, may only be made as follows:

(i) Amendments must be made by submission of the entire text of a newly added or rewritten paragraph(s) with markings pursuant to paragraph (d)(1)(iii) of this section, except that an entire paragraph may be deleted by a statement deleting the paragraph without presentation of the text of the paragraph.

(ii) The precise point in the specification must be indicated where the paragraph to be amended is located.

(iii) Underlining below the subject matter added to the patent and brackets around the subject matter deleted from the patent are to be used to mark the amendments being made.

(2) *Claims.* Amendments to the claims may only be made as follows:

(i)(A) The amendment must be made relative to the patent claims in accordance with paragraph (d)(8) of this section and must include the entire text of each claim which is being proposed to be amended by the current amendment and each proposed new claim being added by the current amendment with markings pursuant to paragraph (d)(2)(i)(C) of this section, except that a patent claim or previously proposed new claim should be cancelled by a statement cancelling the patent claim or proposed new claim without presentation of the text of the patent claim or proposed new claim.

(B) Patent claims must not be renumbered and the numbering of any new claims proposed to be added to the patent must follow the number of the highest numbered patent claim.

(C) Underlining below the subject matter added to the patent and brackets around the subject matter deleted from the patent are to be used to mark the

the claims for which the additional fees are due, they must be paid or the claims cancelled by amendment, prior to the expiration of the time period set for reply by the Office in any notice of fee deficiency.

102. Section 1.494 is amended by revising paragraph (c) to read as follows:

§ 1.494 Entering the national stage in the United States of America as a Designated Office.

* * * * *

priority date. The payment of the surcharge set forth in § 1.492(e) is required for acceptance of the oath or declaration of the inventor later than the expiration of 30 months after the priority date. A copy of the notification mailed to applicant should accompany any reply thereto submitted to the Office.

* * * * *

104. Section 1.510 is amended by revising paragraph (e) to read as follows:

cancelled by a statement cancelling the patent claim or proposed new claim without presentation of the text of the patent claim or proposed new claim.

(B) Patent claims must not be renumbered and the numbering of any new claims proposed to be added to the patent must follow the number of the highest numbered patent claim.

(C) Underlining below the subject matter added to the patent and brackets around the subject matter deleted from the patent are to be used to mark the

amendments being made. If a claim is amended pursuant to paragraph (d)(2)(i)(A) of this section, a parenthetical expression "amended," "twice amended," *etc.*, should follow the original claim number.

(ii) Each amendment submission must set forth the status (*i.e.*, pending or cancelled) as of the date of the amendment, of all patent claims and of all new claims currently or previously proposed.

(iii) Each amendment, when submitted for the first time, must be accompanied by an explanation of the support in the disclosure of the patent for the amendment along with any additional comments on page(s) separate from the page(s) containing the amendment.

(3) No amendment may enlarge the scope of the claims of the patent or introduce new matter. No amendment may be proposed for entry in an expired patent. Moreover, no amendment will be incorporated into the patent by certificate issued after the expiration of the patent.

(4) Although the Office actions will treat proposed amendments as though they have been entered, the proposed amendments will not be effective until the reexamination certificate is issued.

(5) The form of amendments other than to the patent drawings must be in accordance with the following requirements. All amendments must be in the English language and must be legibly written either by a typewriter or mechanical printer in at least 11 point type in permanent dark ink or its equivalent in portrait orientation on flexible, strong, smooth, non-shiny, durable, white paper. All amendments must be presented in a form having sufficient clarity and contrast between the paper and the writing thereon to permit the direct reproduction of readily legible copies in any number by use of photographic, electrostatic, photo-offset, and microfilming processes and electronic reproduction by use of digital imaging or optical character recognition. If the amendments are not of the required quality, substitute typewritten or mechanically printed papers of suitable quality will be required. The papers, including the drawings, must have each page plainly written on only one side of a sheet of paper. The sheets of paper must be the same size and either 21.0 cm. by 29.7 cm. (DIN size A4) or 21.6 cm. by 27.9 cm. (8½ by 11 inches). Each sheet must include a top margin of at least 2.0 cm. (¾ inch), a left side margin of at least 2.5 cm. (1 inch), a right side margin of at least 2.0 cm. (¾ inch), and a bottom margin of at least 2.0 cm. (¾ inch), and no holes should be made in the sheets as submitted. The lines must be double spaced, or one and one-half spaced. The pages must be numbered consecutively, starting with 1, the numbers being centrally located, preferably below the text, or above the text.

(6) *Drawings.* (i) The original patent drawing sheets may not be altered. Any proposed change to the patent drawings must be by way of a new sheet of drawings with the amended figures identified as "amended" and with added figures identified as "new" for each sheet change submitted in compliance with § 1.84.

(ii) Where a change to the drawings is desired, a sketch in permanent ink showing proposed changes in red, to become part of the record, must be filed for approval by the examiner and should be in a separate paper.

(7) The disclosure must be amended, when required by the Office, to correct inaccuracies of description and definition and to secure substantial correspondence between the claims, the remainder of the specification, and the drawings.

(8) All amendments to the patent must be made relative to the patent specification, including the claims, and drawings, which is in effect as of the date of filing of the request for reexamination.

106. Section 1.550 is amended by revising paragraphs (a), (b) and (e) to read as follows:

**§ 1.550 Conduct of reexamination proceedings.**

(a) All reexamination proceedings, including any appeals to the Board of Patent Appeals and Interferences, will be conducted with special dispatch within the Office. After issuance of the reexamination order and expiration of the time for submitting any responses thereto, the examination will be conducted in accordance with §§ 1.104, 1.110 through 1.113 and 1.116, and will result in the issuance of a reexamination certificate under § 1.570.

(b) The patent owner will be given at least thirty days to respond to any Office action. Such response may include further statements in response to any rejections or proposed amendments or new claims to place the patent in a condition where all claims, if amended as proposed, would be patentable.

* * * * *

(e) The reexamination requester will be sent copies of Office actions issued during the reexamination proceeding. After filing of a request for reexamination by a third party requester, any document filed by either the patent owner or the third party requester must be served on the other party in the reexamination proceeding in the manner provided by § 1.248. The document must reflect service or the document may be refused consideration by the Office.

(1) The active participation of the reexamination requester ends with the reply pursuant to § 1.535, and no further submissions on behalf of the reexamination requester will be acknowledged or considered. Further, no submissions on behalf of any third parties will be acknowledged or considered unless such submissions are:

(i) In accordance with § 1.510; or

(ii) Entered in the patent file prior to the date of the order to reexamine pursuant to § 1.525.

(2) Submissions by third parties, filed after the date of the order to reexamine pursuant to § 1.525, must meet the requirements of and will be treated in accordance with § 1.501(a).

107. Section 1.770 is revised to read as follows:

**§ 1.770 Express withdrawal of application for extension of patent term.**

An application for extension of patent term may be expressly withdrawn before a determination is made pursuant to § 1.750 by filing in the Office, in duplicate, a written declaration of withdrawal signed by the owner of record of the patent or its agent. An application may not be expressly withdrawn after the date permitted for reply to the final determination on the application. An express withdrawal pursuant to this section is effective when acknowledged in writing by the Office. The filing of an express withdrawal pursuant to this section and its acceptance by the Office does not entitle applicant to a refund of the filing fee (§ 1.20(j)) or any portion thereof.

108. Section 1.785 is amended by revising paragraph (d) to read as follows:

**§ 1.785 Multiple applications for extension of term of the same patent or of different patents for the same regulatory review period for a product.**

* * * * *

(d) An application for extension shall be considered complete and formal regardless of whether it contains the identification of the holder of the regulatory approval granted with respect to the regulatory review period. When an application contains such information, or is amended to contain such information, it will be considered in determining whether an application is eligible for an extension under this section. A request may be made of any applicant to supply such information

papers, including the drawings, must have each page plainly written on only one side of a sheet of paper. The sheets of paper must be the same size and either 21.0 cm. by 29.7 cm. (DIN size A4) or 21.6 cm. by 27.9 cm. (8½ by 11 inches). Each sheet must include a top margin of at least 2.0 cm. (¾ inch), a left side margin of at least 2.5 cm. (1 inch), a right side margin of at least 2.0 cm. (¾ inch), and a bottom margin of at least 2.0 cm. (¾ inch), and no holes should

rejections or proposed amendments or new claims to place the patent in a condition where all claims, if amended as proposed, would be patentable.

* * * * *

(e) The reexamination requester will be sent copies of Office actions issued during the reexamination proceeding. After filing of a request for reexamination by a third party requester, any document filed by either the patent owner or the third party

be considered complete and formal regardless of whether it contains the identification of the holder of the regulatory approval granted with respect to the regulatory review period. When an application contains such information, or is amended to contain such information, it will be considered in determining whether an application is eligible for an extension under this section. A request may be made of any applicant to supply such information

within a non-extendable period of not less than one month whenever multiple applications for extension of more than one patent are received and rely upon the same regulatory review period. Failure to provide such information within the period for reply set shall be regarded as conclusively establishing that the applicant is not the holder of the regulatory approval.

* * * * *

109. Section 1.804 is amended by revising paragraph (b) to read as follows:

**§ 1.804 Time of making an original deposit.**

* * * * *

(b) When the original deposit is made after the effective filing date of an application for patent, the applicant must promptly submit a statement from a person in a position to corroborate the fact, stating that the biological material which is deposited is a biological material specifically identified in the application as filed.

110. Section 1.805 is amended by revising paragraph (c) to read as follows:

**§ 1.805 Replacement or supplement of deposit.**

* * * * *

(c) A request for a certificate of correction under this section shall not be granted unless the request is made promptly after the replacement or supplemental deposit has been made and the request:

(1) Includes a statement of the reason for making the replacement or supplemental deposit;

(2) Includes a statement from a person in a position to corroborate the fact, and stating that the replacement or supplemental deposit is of a biological material which is identical to that originally deposited;

(3) Includes a showing that the patent owner acted diligently—

(i) In the case of a replacement deposit, in making the deposit after receiving notice that samples could no longer be furnished from an earlier deposit; or

(ii) In the case of a supplemental deposit, in making the deposit after receiving notice that the earlier deposit had become contaminated or had lost its capability to function as described in the specification;

(4) Includes a statement that the term of the replacement or supplemental deposit expires no earlier than the term of the deposit being replaced or supplemented; and

(5) Otherwise establishes compliance with these regulations.

* * * * *

## PART 3—ASSIGNMENT, RECORDING AND RIGHTS OF ASSIGNEE

111. The authority citation for 37 CFR part 3 continues to read as follows:

Authority: 15 U.S.C. 1123; 35 U.S.C. 6.

112. Section 3.11 is revised to read as follows:

**§ 3.11 Documents which will be recorded.**

(a) Assignments of applications, patents, and registrations, accompanied by completed cover sheets as specified in §§ 3.28 and 3.31, will be recorded in the Office. Other documents, accompanied by completed cover sheets as specified in §§ 3.28 and 3.31, affecting title to applications, patents, or registrations, will be recorded as provided in this part or at the discretion of the Commissioner.

(b) Executive Order 9424 of February 18, 1944 (9 FR 1959, 3 CFR 1943–1948 Comp., p. 303) requires the several departments and other executive agencies of the Government, including Government-owned or Government-controlled corporations, to forward promptly to the Commissioner of Patents and Trademarks for recording all licenses, assignments, or other interests of the Government in or under patents or patent applications. Assignments and other documents affecting title to patents or patent applications and documents not affecting title to patents or patent applications required by Executive Order 9424 to be filed will be recorded as provided in this part.

113. Section 3.21 is revised to read as follows:

**§ 3.21 Identification of patents and patent applications.**

An assignment relating to a patent must identify the patent by the patent number. An assignment relating to a national patent application must identify the national patent application by the application number (consisting of the series code and the serial number, *e.g.*, 07/123,456). An assignment relating to an international patent application which designates the United States of America must identify the international application by the international application number (*e.g.*, PCT/US90/01234). If an assignment of a patent application filed under § 1.53(b) is executed concurrently with, or subsequent to, the execution of the patent application, but before the patent application is filed, it must identify the patent application by its date of execution, name of each inventor, and title of the invention so that there can be no mistake as to the patent application intended. If an assignment of a provisional application under § 1.53(c) is executed before the provisional application is filed, it must identify the provisional application by name of each inventor and title of the invention so that there can be no mistake as to the provisional application intended.

114. Section 3.26 is revised to read as follows:

**§ 3.26 English language requirement.**

The Office will accept and record non-English language documents only if accompanied by an English translation signed by the individual making the translation.

115. Section 3.27 is revised to read as follows:

**§ 3.27 Mailing address for submitting documents to be recorded.**

(a) Except as provided in paragraph (b) of this section, documents and cover sheets to be recorded should be addressed to the Commissioner of Patents and Trademarks, Box Assignment, Washington, D.C. 20231, unless they are filed together with new applications or with a petition under § 3.81(b).

(b) A document required by Executive Order 9424 to be filed which does not affect title and is so identified in the cover sheet (see § 3.31(c)(2)) must be addressed and mailed to the Commissioner of Patents and Trademarks, Box Government Interest, Washington, D.C. 20231.

116. Section 3.31 is amended by adding paragraph (c) to read as follows:

**§ 3.31 Cover sheet content.**

* * * * *

(c) Each patent cover sheet required by § 3.28 seeking to record a governmental interest as provided by § 3.11(b) must:

(1) Indicate that the document is to be recorded on the Governmental Register, and, if applicable, that the document is to be recorded on the Secret Register (see § 3.58); and

(2) Indicate, if applicable, that the document to be recorded is not a document affecting title (see § 3.41(b)).

117. Section 3.41 is revised to read as follows:

**§ 3.41 Recording fees.**

(a) All requests to record documents must be accompanied by the appropriate fee. Except as provided in paragraph (b) of this section, a fee is required for each application, patent and registration against which the document is recorded as identified in the cover sheet. The recording fee is set in § 1.21(h) of this chapter for patents

receiving notice that the earlier deposit had become contaminated or had lost its capability to function as described in the specification;

(4) Includes a statement that the term of the replacement or supplemental deposit expires no earlier than the term of the deposit being replaced or supplemented; and

(5) Otherwise establishes compliance with these regulations.

* * * * *

international application number (*e.g.*, PCT/US90/01234). If an assignment of a patent application filed under § 1.53(b) is executed concurrently with, or subsequent to, the execution of the patent application, but before the patent application is filed, it must identify the patent application by its date of execution, name of each inventor, and title of the invention so that there can be no mistake as to the patent application intended. If an assignment

117. Section 3.41 is revised to read as follows:

**§ 3.41 Recording fees.**

(a) All requests to record documents must be accompanied by the appropriate fee. Except as provided in paragraph (b) of this section, a fee is required for each application, patent and registration against which the document is recorded as identified in the cover sheet. The recording fee is set in § 1.21(h) of this chapter for patents

and in § 2.6(q) of this chapter for trademarks.

(b) No fee is required for each patent application and patent against which a document required by Executive Order 9424 is to be filed if:

(1) The document does not affect title and is so identified in the cover sheet (see § 3.31(c)(2)); and

(2) The document and cover sheet are mailed to the Office in compliance with § 3.27(b).

118. Section 3.51 is revised to read as follows:

**§ 3.51 Recording date.**

The date of recording of a document is the date the document meeting the requirements for recording set forth in this part is filed in the Office. A document which does not comply with the identification requirements of § 3.21 will not be recorded. Documents not meeting the other requirements for recording, for example, a document submitted without a completed cover sheet or without the required fee, will be returned for correction to the sender where a correspondence address is available. The returned papers, stamped with the original date of receipt by the Office, will be accompanied by a letter which will indicate that if the returned papers are corrected and resubmitted to the Office within the time specified in the letter, the Office will consider the original date of filing of the papers as the date of recording of the document. The procedure set forth in § 1.8 or § 1.10 of this chapter may be used for resubmissions of returned papers to have the benefit of the date of deposit in the United States Postal Service. If the returned papers are not corrected and resubmitted within the specified period, the date of filing of the corrected papers will be considered to be the date of recording of the document. The specified period to resubmit the returned papers will not be extended.

119. Section 3.58 is added to read as follows:

**§ 3.58 Governmental registers.**

(a) The Office will maintain a Departmental Register to record governmental interests required to be recorded by Executive Order 9424. This Departmental Register will not be open to public inspection but will be available for examination and inspection by duly authorized representatives of the Government. Governmental interests recorded on the Departmental Register will be available for public inspection as provided in § 1.12.

(b) The Office will maintain a Secret Register to record governmental interests required to be recorded by Executive Order 9424. Any instrument to be recorded will be placed on this Secret Register at the request of the department or agency submitting the same. No information will be given concerning any instrument in such record or register, and no examination or inspection thereof or of the index thereto will be permitted, except on the written authority of the head of the department or agency which submitted the instrument and requested secrecy, and the approval of such authority by the Commissioner of Patents and Trademarks. No instrument or record other than the one specified may be examined, and the examination must take place in the presence of a designated official of the Patent and Trademark Office. When the department or agency which submitted an instrument no longer requires secrecy with respect to that instrument, it must be recorded anew in the Departmental Register.

**§ 3.61 [Amended]**

120. The undesignated center heading in Part 3—Assignment, Recording and Rights of Assignee, following § 3.61 is revised to read as follows:

**Action Taken by Assignee**

121. Section 3.73 is amended by revising its heading and paragraph (b) to read as follows:

**§ 3.73 Establishing right of assignee to take action.**

* * * * *

(b) When an assignee seeks to take action in a matter before the Office with respect to a patent application, trademark application, patent, registration, or reexamination proceeding, the assignee must establish its ownership of the property to the satisfaction of the Commissioner. Ownership is established by submitting to the Office, in the Office file related to the matter in which action is sought to be taken, documentary evidence of a chain of title from the original owner to the assignee (*e.g.*, copy of an executed assignment submitted for recording) or by specifying (*e.g.*, reel and frame number) where such evidence is recorded in the Office. The submission establishing ownership must be signed by a party authorized to act on behalf of the assignee. Documents submitted to establish ownership may be required to be recorded as a condition to permitting the assignee to take action in a matter pending before the Office.

## PART 5—SECRECY OF CERTAIN INVENTIONS AND LICENSES TO EXPORT AND FILE APPLICATIONS IN FOREIGN COUNTRIES

122. The authority citation for 37 CFR Part 5 continues to read as follows:

Authority: 35 U.S.C. 6, 41, 181–188, as amended by the Patent Law Foreign Filing Amendments Act of 1988, Pub. L. 100–418, 102 Stat. 1567; the Arms Export Control Act, as amended, 22 U.S.C. 2751 *et seq.*; the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 *et seq.*; and the Nuclear Non-Proliferation Act of 1978, 22 U.S.C. 3201 *et seq.*; and the delegations in the regulations under these Acts to the Commissioner (15 CFR 370.10(j), 22 CFR 125.04, and 10 CFR 810.7).

123. Section 5.1 is revised to read as follows:

**§ 5.1 Correspondence.**

All correspondence in connection with this part, including petitions, must be addressed to "Assistant Commissioner for Patents (Attention Licensing and Review), Washington, DC 20231."

124. Section 5.2 is amended by removing paragraphs (c) and (d) and revising paragraph (b) to read as follows:

**§ 5.2 Secrecy order.**

* * * * *

(b) Any request for compensation as provided in 35 U.S.C. 183 must not be made to the Patent and Trademark Office, but directly to the department or agency which caused the secrecy order to be issued.

125. Section 5.3 is amended by revising paragraph (c) to read as follows:

**§ 5.3 Prosecution of application under secrecy orders; withholding patent.**

* * * * *

(c) When the national application is found to be in condition for allowance except for the secrecy order the applicant and the agency which caused the secrecy order to be issued will be notified. This notice (which is not a notice of allowance under § 1.311 of this chapter) does not require reply by the applicant and places the national application in a condition of suspension until the secrecy order is removed. When the secrecy order is removed the Patent and Trademark Office will issue a notice of allowance under § 1.311 of this chapter, or take such other action as may then be warranted.

* * * * *

126. Section 5.4 is amended by revising paragraphs (a) and (d) to read as follows:

recorded by Executive Order 9424. This Departmental Register will not be open to public inspection but will be available for examination and inspection by duly authorized representatives of the Government. Governmental interests recorded on the Departmental Register will be available for public inspection as provided in § 1.12.

(b) The Office will maintain a Secret Register to record governmental interests required to be recorded by Executive Order 9424. Any instrument to be recorded will be placed on this Secret Register at the request of the department or agency submitting the same. No information will be given concerning any instrument in such record or register, and no examination or inspection thereof or of the index thereto will be permitted, except on the written authority of the head of the department or agency which submitted the instrument and requested secrecy, and the approval of such authority by the Commissioner of Patents and Trademarks. No instrument or record other than the one specified may be examined, and the examination must take place in the presence of a designated official of the Patent and Trademark Office. When the department or agency which submitted an instrument no longer requires secrecy with respect to that instrument, it must be recorded anew in the Departmental Register.

(a) The Office will maintain a Departmental Register to record governmental interests required to be recorded by Executive Order 9424. This Departmental Register will not be open to public inspection but will be available for examination and inspection by duly authorized representatives of the Government. Governmental interests recorded on the Departmental Register will be available for public inspection as provided in § 1.12.

(b) The Office will maintain a Secret Register to record governmental interests required to be recorded by Executive Order 9424. Any instrument to be recorded will be placed on this Secret Register at the request of the department or agency submitting the same. No information will be given concerning any instrument in such record or register, and no examination or inspection thereof or of the index thereto will be permitted, except on the written authority of the head of the department or agency which submitted the instrument and requested secrecy, and the approval of such authority by the Commissioner of Patents and Trademarks. No instrument or record other than the one specified may be examined, and the examination must take place in the presence of a designated official of the Patent and Trademark Office. When the department or agency which submitted an instrument no longer requires secrecy with respect to that instrument, it must be recorded anew in the Departmental Register.

**§ 3.61 [Amended]**

120. The undesignated center heading in Part 3—Assignment, Recording and Rights of Assignee, following § 3.61 is revised to read as follows:

**Action Taken by Assignee**

121. Section 3.73 is amended by revising its heading and paragraph (b) to read as follows:

**§ 3.73 Establishing right of assignee to take action.**

* * * * *

(b) When an assignee seeks to take action in a matter before the Office with respect to a patent application, trademark application, patent, registration, or reexamination proceeding, the assignee must establish its ownership of the property to the satisfaction of the Commissioner. Ownership is established by submitting to the Office, in the Office file related to the matter in which action is sought to be taken, documentary evidence of a chain of title from the original owner to the assignee (*e.g.*, copy of an executed assignment submitted for recording) or by specifying (*e.g.*, reel and frame number) where such evidence is recorded in the Office. The submission establishing ownership must be signed by a party authorized to act on behalf of the assignee. Documents submitted to establish ownership may be required to be recorded as a condition to permitting the assignee to take action in a matter pending before the Office.

**§ 5.4 Petition for rescission of secrecy order.**

(a) A petition for rescission or removal of a secrecy order may be filed by, or on behalf of, any principal affected thereby. Such petition may be in letter form, and it must be in duplicate.

* * * * *

(d) Appeal to the Secretary of Commerce, as provided by 35 U.S.C. 181, from a secrecy order cannot be taken until after a petition for rescission of the secrecy order has been made and denied. Appeal must be taken within sixty days from the date of the denial, and the party appealing, as well as the department or agency which caused the order to be issued, will be notified of the time and place of hearing.

127. Section 5.5 is amended by revising paragraphs (b) and (e) to read as follows:

**§ 5.5 Permit to disclose or modification of secrecy order.**

* * * * *

(b) Petitions for a permit or modification must fully recite the reason or purpose for the proposed disclosure. Where any proposed disclosee is known to be cleared by a defense agency to receive classified information, adequate explanation of such clearance should be made in the petition including the name of the agency or department granting the clearance and the date and degree thereof. The petition must be filed in duplicate.

* * * * *

(e) Organizations requiring consent for disclosure of applications under secrecy order to persons or organizations in connection with repeated routine operation may petition for such consent in the form of a general permit. To be successful such petitions must ordinarily recite the security clearance status of the disclosees as sufficient for the highest classification of material that may be involved.

**§ 5.6 [Removed and reserved]**

128. Section 5.6 is removed and reserved.

**§ 5.7 [Removed and reserved]**

129. Section 5.7 is removed and reserved.

**§ 5.8 [Removed and reserved]**

130. Section 5.8 is removed and reserved.

131. Section 5.11 is amended by revising paragraphs (b), (c) and (e)(3) to read as follows:

**§ 5.11 License for filing in a foreign country an application on an invention made in the United States or for transmitting international application.**

* * * * *

(b) The license from the Commissioner of Patents and Trademarks referred to in paragraph (a) would also authorize the export of technical data abroad for purposes relating to the preparation, filing or possible filing and prosecution of a foreign patent application without separately complying with the regulations contained in 22 CFR parts 121 through 130 (International Traffic in Arms Regulations of the Department of State), 15 CFR part 779 (Regulations of the Office of Export Administration, International Trade Administration, Department of Commerce) and 10 CFR part 810 (Foreign Atomic Energy Programs of the Department of Energy).

(c) Where technical data in the form of a patent application, or in any form, is being exported for purposes related to the preparation, filing or possible filing and prosecution of a foreign patent application, without the license from the Commissioner of Patents and Trademarks referred to in paragraphs (a) or (b) of this section, or on an invention not made in the United States, the export regulations contained in 22 CFR parts 120 through 130 (International Traffic in Arms Regulations of the Department of State), 15 CFR parts 768–799 (Export Administration Regulations of the Department of Commerce) and 10 CFR part 810 (Assistance to Foreign Atomic Energy Activities Regulations of the Department of Energy) must be complied with unless a license is not required because a United States application was on file at the time of export for at least six months without a secrecy order under § 5.2 being placed thereon. The term "exported" means export as it is defined in 22 CFR part 120, 15 CFR part 779 and activities covered by 10 CFR part 810.

* * * * *

(e) * * *

(3) For subsequent modifications, amendments and supplements containing additional subject matter to, or divisions of, a foreign patent application if:

(i) A license is not, or was not, required under paragraph (e)(2) of this section for the foreign patent application;

(ii) The corresponding United States application was not required to be made available for inspection under 35 U.S.C. 181; and

(iii) Such modifications, amendments, and supplements do not, or did not, change the general nature of the invention in a manner which would require any corresponding United States application to be or have been available for inspection under 35 U.S.C. 181.

* * * * *

132. Section 5.12 is amended by revising paragraph (b) to read as follows:

**§ 5.12 Petition for license.**

* * * * *

(b) Petitions for license should be presented in letter form, and must include the petitioner's address and full instructions for delivery of the requested license when it is to be delivered to other than the petitioner. If expedited handling of the petition under this paragraph is sought, the petition must also include the fee set forth in § 1.17(h).

133. Section 5.13 is revised to read as follows:

**§ 5.13 Petition for license; no corresponding application.**

If no corresponding national or international application has been filed in the United States, the petition for license under § 5.12(b) must also be accompanied by a legible copy of the material upon which a license is desired. This copy will be retained as a measure of the license granted.

134. Section 5.14 is amended by revising paragraph (a) to read as follows:

**§ 5.14 Petition for license; corresponding U.S. application.**

(a) When there is a corresponding United States application on file, a petition for license under § 5.12(b) must also identify this application by application number, filing date, inventor, and title, but a copy of the material upon which the license is desired is not required. The subject matter licensed will be measured by the disclosure of the United States application.

* * * * *

135. Section 5.15 is amended by revising paragraphs (a), (b), (c) and (e) to read as follows:

**§ 5.15 Scope of license.**

(a) Applications or other materials reviewed pursuant to §§ 5.12 through 5.14, which were not required to be made available for inspection by defense agencies under 35 U.S.C. 181, will be eligible for a license of the scope provided in this paragraph. This license permits subsequent modifications, amendments, and supplements containing additional subject matter to, or divisions of, a foreign patent application, if such changes to the application do not alter the general nature of the invention in a manner

reserved.

**§ 5.7 [Removed and reserved]**

129. Section 5.7 is removed and reserved.

**§ 5.8 [Removed and reserved]**

130. Section 5.8 is removed and reserved.

131. Section 5.11 is amended by revising paragraphs (b), (c) and (e)(3) to read as follows:

application if:

(i) A license is not, or was not, required under paragraph (e)(2) of this section for the foreign patent application;

(ii) The corresponding United States application was not required to be made available for inspection under 35 U.S.C. 181; and

(iii) Such modifications, amendments, and supplements do not, or did not, change the general nature of the

5.14, which were not required to be made available for inspection by defense agencies under 35 U.S.C. 181, will be eligible for a license of the scope provided in this paragraph. This license permits subsequent modifications, amendments, and supplements containing additional subject matter to, or divisions of, a foreign patent application, if such changes to the application do not alter the general nature of the invention in a manner

which would require the United States application to have been made available for inspection under 35 U.S.C. 181. Grant of this license authorizing the export and filing of an application in a foreign country or the transmitting of an international application to any foreign patent agency or international patent agency when the subject matter of the foreign or international application corresponds to that of the domestic application. This license includes authority:

(1) To export and file all duplicate and formal application papers in foreign countries or with international agencies;

(2) To make amendments, modifications, and supplements, including divisions, changes or supporting matter consisting of the illustration, exemplification, comparison, or explanation of subject matter disclosed in the application; and

(3) To take any action in the prosecution of the foreign or international application provided that the adding of subject matter or taking of any action under paragraphs (a)(1) or (2) of this section does not change the general nature of the invention disclosed in the application in a manner which would require such application to have been made available for inspection under 35 U.S.C. 181 by including technical data pertaining to:

(i) Defense services or articles designated in the United States Munitions List applicable at the time of foreign filing, the unlicensed exportation of which is prohibited pursuant to the Arms Export Control Act, as amended, and 22 CFR parts 121 through 130; or

(ii) Restricted Data, sensitive nuclear technology or technology useful in the production or utilization of special nuclear material or atomic energy, dissemination of which is subject to restrictions of the Atomic Energy Act of 1954, as amended, and the Nuclear Non-Proliferation Act of 1978, as implemented by the regulations for Unclassified Activities in Foreign Atomic Energy Programs, 10 CFR part 810, in effect at the time of foreign filing.

* * * * *

(b) Applications or other materials which were required to be made available for inspection under 35 U.S.C. 181 will be eligible for a license of the scope provided in this paragraph. Grant of this license authorizes the export and filing of an application in a foreign country or the transmitting of an international application to any foreign patent agency or international patent agency. Further, this license includes authority to export and file all duplicate and formal papers in foreign countries or with foreign and international patent agencies and to make amendments, modifications, and supplements to, file divisions of, and take any action in the prosecution of the foreign or international application, provided subject matter additional to that covered by the license is not involved.

(c) A license granted under § 5.12(b) pursuant to § 5.13 or § 5.14 shall have the scope indicated in paragraph (a) of this section, if it is so specified in the license. A petition, accompanied by the required fee (§ 1.17(h)), may also be filed to change a license having the scope indicated in paragraph (b) of this section to a license having the scope indicated in paragraph (a) of this section. No such petition will be granted if the copy of the material filed pursuant to § 5.13 or any corresponding United States application was required to be made available for inspection under 35 U.S.C. 181. The change in the scope of a license will be effective as of the date of the grant of the petition.

* * * * *

(e) Any paper filed abroad or transmitted to an international patent agency following the filing of a foreign or international application which changes the general nature of the subject matter disclosed at the time of filing in a manner which would require such application to have been made available for inspection under 35 U.S.C. 181 or which involves the disclosure of subject matter listed in paragraphs (a)(3)(i) or (ii) of this section must be separately licensed in the same manner as a foreign or international application. Further, if no license has been granted under § 5.12(a) on filing the corresponding United States application, any paper filed abroad or with an international patent agency which involves the disclosure of additional subject matter must be licensed in the same manner as a foreign or international application.

* * * * *

**§ 5.16 [Removed and reserved]**

136. Section 5.16 is removed and reserved.

**§ 5.17 [Removed and reserved]**

137. Section 5.17 is removed and reserved.

138. Section 5.18 is revised to read as follows:

**§ 5.18 Arms, ammunition, and implements of war.**

(a) The exportation of technical data relating to arms, ammunition, and implements of war generally is subject to the International Traffic in Arms Regulations of the Department of State (22 CFR parts 120 through 130); the articles designated as arms, ammunitions, and implements of war are enumerated in the U.S. Munitions List (22 CFR part 121). However, if a patent applicant complies with regulations issued by the Commissioner of Patents and Trademarks under 35 U.S.C. 184, no separate approval from the Department of State is required unless the applicant seeks to export technical data exceeding that used to support a patent application in a foreign country. This exemption from Department of State regulations is applicable regardless of whether a license from the Commissioner is required by the provisions of §§ 5.11 and 5.12 (22 CFR part 125).

(b) When a patent application containing subject matter on the Munitions List (22 CFR part 121) is subject to a secrecy order under § 5.2 and a petition is made under § 5.5 for a modification of the secrecy order to permit filing abroad, a separate request to the Department of State for authority to export classified information is not required (22 CFR part 125).

139. Section 5.19 is revised to read as follows:

**§ 5.19 Export of technical data.**

(a) Under regulations (15 CFR 770.10(j)) established by the Department of Commerce, a license is not required in any case to file a patent application or part thereof in a foreign country if the foreign filing is in accordance with the regulations (§§ 5.11 through 5.25) of the Patent and Trademark Office.

(b) An export license is not required for data contained in a patent application prepared wholly from foreign-origin technical data where such application is being sent to the foreign inventor to be executed and returned to the United States for subsequent filing in the U.S. Patent and Trademark Office (15 CFR 779A.3(e)).

140. Section 5.20 is revised to read as follows:

**§ 5.20 Export of technical data relating to sensitive nuclear technology.**

Under regulations (10 CFR 810.7) established by the United States Department of Energy, an application filed in accordance with the regulations (§§ 5.11 through 5.25) of the Patent and Trademark Office and eligible for foreign filing under 35 U.S.C. 184, is considered to be information available to the public in published form and a generally authorized activity for the purposes of the Department of Energy regulations.

* * * * *

(b) Applications or other materials which were required to be made available for inspection under 35 U.S.C. 181 will be eligible for a license of the scope provided in this paragraph. Grant of this license authorizes the export and filing of an application in a foreign country or the transmitting of an international application to any foreign patent agency or international patent agency. Further, this license includes

**§ 5.17 [Removed and reserved]**

137. Section 5.17 is removed and reserved.

138. Section 5.18 is revised to read as follows:

**§ 5.18 Arms, ammunition, and implements of war.**

(a) The exportation of technical data relating to arms, ammunition, and implements of war generally is subject to the International Traffic in Arms

Under regulations (10 CFR 810.7) established by the United States Department of Energy, an application filed in accordance with the regulations (§§ 5.11 through 5.25) of the Patent and Trademark Office and eligible for foreign filing under 35 U.S.C. 184, is considered to be information available to the public in published form and a generally authorized activity for the purposes of the Department of Energy regulations.

**§ 5.25 [Amended]**

141. Section 5.25 is amended by removing paragraph (c).

**§ 5.31 [Removed and reserved]**

142. Section 5.31 is removed and reserved.

**§ 5.32 [Removed and reserved]**

143. Section 5.32 is removed and reserved.

**§ 5.33 [Removed and reserved]**

144. Section 5.33 is removed and reserved.

## PART 7—REGISTER OF GOVERNMENT INTERESTS IN PATENTS [REMOVED AND RESERVED]

145. Part 7 is removed and reserved.

## PART 10—REPRESENTATION OF OTHERS BEFORE THE PATENT AND TRADEMARK OFFICE

146. The authority citation for 37 CFR part 10 continues to read as follows:

**Authority:** 5 U.S.C. 500, 15 U.S.C. 1123; 35 U.S.C. 6, 31, 32, 41.

147. Section 10.18 is revised to read as follows:

**§ 10.18 Signature and certificate for correspondence filed in the Patent and Trademark Office.**

(a) For all documents filed in the Office in patent, trademark, and other non-patent matters, except for correspondence that is required to be signed by the applicant or party, each piece of correspondence filed by a practitioner in the Patent and Trademark Office must bear a signature, personally signed by such practitioner, in compliance with § 1.4(d)(1) of this chapter.

(b) By presenting to the Office (whether by signing, filing, submitting, or later advocating) any paper, the party presenting such paper, whether a practitioner or non-practitioner, is certifying that—

(1) All statements made therein of the party's own knowledge are true, all statements made therein on information and belief are believed to be true, and all statements made therein are made with the knowledge that whoever, in any matter within the jurisdiction of the Patent and Trademark Office, knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact, or makes any false, fictitious or fraudulent statements or representations, or makes or uses any false writing or document knowing the same to contain any false, fictitious or fraudulent statement or entry, shall be subject to the penalties set forth under 18 U.S.C. 1001, and that violations of this paragraph may jeopardize the validity of the application or document, or the validity or enforceability of any patent, trademark registration, or certificate resulting therefrom; and

(2) To the best of the party's knowledge, information and belief, formed after an inquiry reasonable under the circumstances, that—

(i) The paper is not being presented for any improper purpose, such as to harass someone or to cause unnecessary delay or needless increase in the cost of prosecution before the Office;

(ii) The claims and other legal contentions therein are warranted by existing law or by a nonfrivolous argument for the extension, modification, or reversal of existing law or the establishment of new law;

(iii) The allegations and other factual contentions have evidentiary support or, if specifically so identified, are likely to have evidentiary support after a reasonable opportunity for further investigation or discovery; and

(iv) The denials of factual contentions are warranted on the evidence, or if specifically so identified, are reasonably based on a lack of information or belief.

(c) Violations of paragraph (b)(1) of this section by a practitioner or non-practitioner may jeopardize the validity of the application or document, or the validity or enforceability of any patent, trademark registration, or certificate resulting therefrom. Violations of any of paragraphs (b)(2) (i) through (iv) of this section are, after notice and reasonable opportunity to respond, subject to such sanctions as deemed appropriate by the Commissioner, or the Commissioner's designee, which may include, but are not limited to, any combination of—

(1) Holding certain facts to have been established;

(2) Returning papers;

(3) Precluding a party from filing a paper, or presenting or contesting an issue;

(4) Imposing a monetary sanction;

(5) Requiring a terminal disclaimer for the period of the delay; or

(6) Terminating the proceedings in the Patent and Trademark Office.

(d) Any practitioner violating the provisions of this section may also be subject to disciplinary action. See § 10.23(c)(15).

148. Section 10.23 is amended by revising paragraph (c)(15) to read as follows:

**§ 10.23 Misconduct.**

* * * * *

(c) * * *

(15) Signing a paper filed in the Office in violation of the provisions of § 10.18 or making a scandalous or indecent statement in a paper filed in the Office.

* * * * *

Dated: September 26, 1997.

**Bruce A. Lehman,**

*Assistant Secretary of Commerce and Commissioner of Patents and Trademarks.*

[FR Doc. 97-26339 Filed 10-9-97; 8:45 am]

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Calendar No. 283

97TH CONGRESS, 1st Session } SENATE { REPORT No. 97-194

# SMALL BUSINESS INNOVATION RESEARCH ACT OF 1981

SEPTEMBER 25 (legislative day, SEPTEMBER 9), 1981.—Ordered to be printed

Mr. RUDMAN, from the Committee on Small Business, submitted the following

## REPORT

together with

## ADDITIONAL VIEWS

[To accompany S. 881]

The Committee on Small Business, to which was referred the bill (S. 881), the Small Business Innovation Research Act of 1981, having considered the same, reports favorably thereon with an amendment in the nature of a substitute and recommends that the bill as amended do pass.

### I. BACKGROUND

Over the past decade the rate of productivity increase in the United States has been well below that of all the leading industrial nations, most notably Japan and Germany. While this relative decline in American productivity is due to many factors, a major one is certainly the slowdown in our technological innovation.

Yet as other nations have been accelerating their research efforts, our Federal investment in research and development (R&D), in constant dollars, has remained virtually unchanged for the past decade. The slight growth reflected in this year's R. & D. budget is due primarily to the substantial increase in defense spending. It seems clear, therefore, that if the United States is to maintain its competitive position in the world market, it must use its limited R. & D. resources in a way that guarantees the maximum benefits.

The Small Business Innovation Research Act of 1981, S. 881, is designed to do just that. The purpose of the bill is twofold: to more effectively meet R. & D. needs brought on by the utilization of small innovative firms (which have been consistently shown to be the most prolific source of new technologies) and to attract private capital to commercialize the results of the Federal research.

79-006 O

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79-006 O

Each agency with an R. & D. budget in excess of $100 million will be required to establish a Small Business Innovation Research (SBIR) program modeled after that of the highly successful National Science Foundation program. Under the program established in S. 881, small firms will be invited to submit research proposals to an agency concerning topics selected by each agency in accordance with its own R. & D. objectives. Those proposals which show the most scientific and technical merit and feasibility may be funded in the range of $30,000 to $50,000 for the initial development. Second-tier financing ranging from $100,000 to $500,000 may be provided for further research on those Phase I proposals that appear the most promising. Stringent peer review procedures are encouraged in the evaluation of all proposals.

In assessing Phase II proposals of approximately equal scientific and technical merit, agencies shall give special consideration to recipients of Phase I grants that have attracted private sector funding commitments to pursue commercial applications of the research. This special consideration serves as a built-in incentive for participants in the program to seek ways to build upon the Federal research, thus fulfilling one of the bill's primary objectives.

## II. Legislative History

In August 1978, the Senate and House Committees on Small Business conducted joint hearings on the role of small businesses in the nation's effort to encourage technological innovation. The major conclusion of these hearings was that small business is a greatly underutilized resource for the development of new technologies.

In July 1979, three task forces assembled by the Small Business Administration to consider ways to stimulate small business innovation presented a report to the Senate Small Business Committee. The report recommended legislation covering a wide range of issues affecting innovation.

In October 1979, S. 1860, the Small Business Innovation Act of 1979, was introduced by Senator Gaylord Nelson, then Chairman of the Senate Small Business Committee, along with 14 other Senators. This was a four-titled bill which addressed research and development procurement, patent, tax, and regulatory impediments to the innovation process. It was jointly referred to the Small Business, Judiciary, and Finance Committees. The patent and regulatory provisions were separately reported favorably by the Judiciary Committee and subsequently enacted into law (Public Law 96–517 and Public Law 96–354 respectively).

In January 1980, the White House Conference on Small Business was held in Washington, D.C. During the four-day conference, over 2,000 small businesses from every state in the union gathered to establish an agenda for action for small businesses during the next decade. Innovation and technology was one of the key areas addressed. The delegates voted the enactment of a small business innovation bill which mandated the establishment of Federal SBIR programs (the then-pending S. 1860) as the sixth most important recommendation of the Conference. This was the only recommendation endorsing specific legislation.

mandated the establishment of Federal SBIR programs (the then-pending S. 1860) as the sixth most important recommendation of the Conference. This was the only recommendation endorsing specific legislation.

In March and April of 1980, the Senate Small Business Committee held 4 days of hearings on Title I, the research and development procurement title of S. 1860. This title amended the Small Business Act by providing (1) that Federal agencies set aside 10 percent of their R. & D. budgets for small businesses; and (2) that agencies having R. & D. budgets over $100 million establish a Small Business Innovation Research (SBIR) program to enable small firms to meet Federal R. & D. objectives and to pursue commercial applications of the Federal research.

Following the March/April hearings, the Committee favorably reported an original bill, S. 2749, containing amended provisions of Title I of S. 1860. However, S. 2749 was never considered by the full Senate. The House Small Business Committee also favorably reported small business innovation legislation.

On April 7, 1981, Senators Rudman and Weicker introduced S. 881, the "Small Business Innovation Research Act of 1981." Since its introduction, the legislation has attracted the support of more than 80 Senators. The bill differs from legislation of the previous Congress in that it requires only that, with certain limitations, agencies with R. & D. budgets in excess of $100 million establish an SBIR program. Generally, the program established by S. 881 is to be phased in over a three year period and funded from one percent of agencies' existing extramural R. & D. budgets.

Senate hearings were held in Washington, D.C., on May 13, and July 15 and 16, 1981. Field hearings were held in Boston on June 30, 1981, and in San Francisco on July 24, 1981.

The bill was considered and amended by the full Committee. On September 22, 1981, with a quorum present, the Committee ordered the bill favorably reported with an amendment in the nature of a substitute with a roll call vote of 16 to 0.

## III. Need for the Legislation

It is widely recognized that technological innovation creates new jobs, increases productivity, enhances the competitiveness of products in foreign markets, and stimulates economic growth. It also serves as a valuable counterforce to inflation and the United States balance-of-payments deficit. When technological innovation lags, there is legitimate cause for concern.

Unfortunately, the United States is experiencing a serious decline in technological innovation. One indicator of this decline is the fall off in the number of U.S. patents issued over the past decade. In 1970, the U.S. Patent Office issued 70,131 patents; in 1980, it issued only 61,227. Equally significant is the rise in the percentage of U.S. patents issued to residents of foreign countries. While only 25 percent of all U.S. patents issued in 1970 went to foreigners, in 1980 this number had soared to near 40 percent. Japan alone received close to 11 percent of all U.S. patents issued. If we are to reverse this trend, a more coordinated federal strategy must be developed.

Sherman Abrahamson, special assistant to the president of Control Data, testified before the Committee that innovation would flourish "only in a free enterprise economy with a strong business sector." He went on to say:

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Sherman Abrahamson, special assistant to the president of Control Data, testified before the Committee that innovation would flourish "only in a free enterprise economy with a strong business sector." He went on to say:

> To many, the Federal Government is seen as one of the major contributors to the steady ossification of our once dynamic economy by discriminating against small enterprise. For example, the Federal Government procures over $30 billion in research and development annually, but less than 4 percent from small businesses. Of the over $15 billion procured from business, just 70 companies do 80 percent of this research, and only 4 account for nearly 20 percent. Most of these are huge firms. This disproportion is indeed astonishing, because the Federal Government itself, in study after study, has found that small firms are substantially more innovative per research dollar spent than are large firms. This is the factual support for the claim that the Federal Government is wasting vast amounts of taxes, while at the same time contributing to the erosion of our economic dynamism.

Since the Federal Government underwrites approximately one half of all the research and development conducted in the United States, and with the already evident decline in the availability of non-defense research dollars, it is essential that the available funds be used in the most effective and efficient way.

Federal procurement policies for the most part fail to take advantage of the superior innovative capabilities of small businesses. In its 1979 final report, the Commerce Department's Advisory Committee on Industrial Innovation addressed the problem directly:

> We must reverse government policies that discourage small business by inhibiting capital investment, imposing excessive regulatory and legislative burdens, *and failing to encourage full participation in government procurement.*[1] (Emphasis added)

The report went on to say:

> A fundamental reason for the decline in innovation is the failure of Federal policymakers and administrators to recognize the contributions from small firms to technological innovation, and their failure to recognize that small innovative firms cannot accommodate the burdens of government as readily as large companies. The burden of government upon small innovators is disproportionately large and often overwhelming. Government policies and regulations that treat large and small firms equally are in fact, discriminatory against small firms.[2]

### A. ROLE OF SMALL BUSINESS

Numerous studies have shown that small businesses are our Nation's most efficient and fertile source of innovations. Yet only 3.5 to 4 percent of the Federal R. & D. dollar is spent with small firms. This underutilization of small businesses in Federal R. & D. programs is especially regrettable when considering the highly successful track

[1] Report of Advisory Committee on Industrial Innovation," (U.S. Department of Commerce. September 1979), p. 225.
[2] Ibid. p. 263.

especially regrettable when considering the highly successful track

[1] Report of Advisory Committee on Industrial Innovation," (U.S. Department of Commerce. September 1979), p. 225.
[2] Ibid. p. 263.

record of small firms in generating jobs, tax revenues, and other economic and societal benefits.

According to the Office of Federal Procurement Policy, between 1953 and 1973, firms with fewer than 1,000 employees accounted for approximately one-half of the major U.S. innovations. Moreover, these firms had a ratio of innovations to R. & D. employment which was four times greater than that found in larger firms and a total cost per R. & D. scientist or engineer which was about one-half that found in firms of over 1,000 employees.[3]

Similarly, a National Science Foundation survey of major innovations introduced into the market between 1953 and 1973 found that small firms produced about 24 times as many innovations per R. & D. dollar as large firms and 4 times as many as medium-sized firms.[4]

Studies also show the important role of small innovative businesses in creating jobs and stimulating economic growth. David Birch of MIT found that firms with 500 or less employees provided 87 percent of all new jobs in the United States between 1969 and 1976. He also found that the best job creator was the small technology-based firm.[5]

Another study conducted by the Massachusetts Institute of Technology Development Foundation found that young technology companies created 34,369 new jobs between 1969 and 1974 compared with 25,558 new jobs created by mature industry leaders. The study further found that younger, innovative companies provided $2.3 billion of income tax revenues compared to $1.5 billion for mature companies.[6]

Similar conclusions emerged from an examination of 269 firms by the American Electronics Association. This investigation showed that in 1976 employment growth in start-up companies was 115 times greater than in mature companies, 55 times greater than in developing companies, and 20–40 times greater than in "teenage" companies. The study also showed that new and small, innovative companies made substantially greater contributions to the U.S. economy in terms of overall growth, taxes paid, and export sales.[7]

Since the economic rewards of R. & D. conducted by small companies are so obvious, it is disturbing that so much of our research is concentrated in the larger firms. In 1980, for example, 60 percent of industry funded R. & D. was conducted in 35 firms.[8] Federally funded industrial R. & D. is even more concentrated. A soon to be released National Science Foundation report indicates that 20 companies receive 71 percent of Federal R. & D. funds contracted to industry.[9] This concentration of R. & D. in the larger companies is especially unfortunate in light of studies that show that a larger proportion of patented innovations

[3] "Small Firms and Federal Research and Development," Report of the Office of Federal Procurement Policy, (Office of Management and Budget, Mar. 10, 1977).
[4] "Science Indicators," 1976 (National Science Foundation).
[5] David L. Birch, "The Job Generation Process," (Department of Commerce, February 1979).
[6] John O. Flender and Richard S. Morse, "The Role of New Technical Enterprise in the U.S. Economy," (M.I.T. Development Foundation, 1975).
[7] Statement of Dr. Edwin V. W. Zschau, Chairman, Capital Formation Task Force of the American Electronics Association, at hearing before the Senate Select Committee on Small Business, Feb. 8, 1978, pages 5 et seq.
[8] Memorandum to the Senate Committee on Small Business from the Congressional Research Service, Library of Congress, Sept. 2, 1981.
[9] National Science Foundation Report, "R. & D. in Industry, 1979: Funds, 1979 and Scientists and Engineers, January 1980."

Small Business, Feb. 8, 1978, pages 5 et seq.
[8] Memorandum to the Senate Committee on Small Business from the Congressional Research Service, Library of Congress, Sept. 2, 1981.
[9] National Science Foundation Report, "R. & D. in Industry, 1979: Funds, 1979 and Scientists and Engineers, January 1980."

created by small businesses are used commercially than are those created by larger firms.[10]

Based on the above studies, and on a series of Congressional hearings and executive agency studies during the past three years concerning innovation, the Committee concluded that one way to revitalize the U.S. economy is to develop a means by which Federal agencies can better tap the innovative potential of small businesses. S. 881 provides this means.

### B. IMPORTANCE OF FINANCIAL LEVERAGE

Several witnesses testifying before the Committee addressed the issue of the need for some type of financial leverage for small businesses. They argued that tax write-offs were not very helpful to small innovative firms. Dr. Walter Syniuta, president of Advanced Mechanical Technology, Inc., a machine tools firm, told the Committee that tax incentives would not have much effect on small embryonic companies since one has to make money before tax credits are beneficial. Stan Mason, president and founder of Simco, Inc., a small company specializing in the conceptualization and development of new products, agreed, comparing such incentives to "casting bread upon the waters when the tide is coming in."

The Committee agrees that tax incentives alone are insufficient support for small innovative firms. Some other incentive in the nature of what Ann Eskesen, Director of the Small Business Resource Development Center at Bently College, calls "proof-of-concept money" is necessary. Such money would support the exploration of innovative ideas in the early stages. Yet because technological risks are high in these stages, it is difficult for small research firms to attract this necessary start-up capital. Moreover, as Ms. Eskesen told the Committee.

> It is estimated that a small firm must raise more than twice the capital from outside sources to support the same level of R. & D. as a larger corporation. The higher debt-to-equity condition that generally characterizes the smaller firm already limits the level of outside capital which can be accessed and the problem is further compounded in the present circumstances of high interest rates and tighter credits.

Dr. Orrie Friedman, president of the biotechnology firm, Collaborative Research, Inc., testified that venture capitalists were not a realistic source of financial support for ideas at the conceptual state and that an SBIR type program was essential.

Representatives from the venture capital community agreed with this assessment. Bill Chandler of the Bay Venture Group in San Francisco and James Watts, Associate Director of the National Association of Small Business Investment Companies, acknowledged that venture capitalists were reluctant to invest in companies without proven track records. Mr. Chandler saw the SBIR program as a type of "preventure" investment which would complement the efforts of the venture capitalists. Mr. Watts testified that once seed money was provided to start-up companies, the venture capital community would be ready, willing, and eager to invest in them.

[10] M. Kamien and N. Schwartz. "Market Structure and Innovation: A Survey," (Northwestern University Graduate School of Management: Evanston, Ill., June 1974).

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The Committee believes that providing small firms with R. & D. seed money as mandated in S. 881 will encourage additional private investment in these firms. The agency-wide SBIR program outlined in the legislation should facilitate the ability of participating firms to attract venture capital as well as other financial commitments from the private sector. For example, Dr. Friedman told the Committee that his success under the NSF SBIR program resulted in Dow Chemical Company committing $5 million in follow-on capital investment.[11] In any event, it seems clear that some seed capital stimulus is necessary if the innovative potential of small firms is to be realized.

## IV. Committee Considerations

### A. GOALS OF THE LEGISLATION

The Small Business Innovation Research Act of 1981 seeks to stimulate technological innovation in both the public and the private sector. It seeks to do this by providing a mechanism—the Small Business Innovation Research program—through which small businesses can be systematically used to meet Federal research and development needs. This mechanism should also increase the private sector commercialization and utilization of inventions derived from the Federal research.

An editorial in The Washington Post addressed the need for applying the results of our nation's research efforts as follows:

> Of the many likely explanations for the relatively low level of innovation, one, a lack of basic R. & D., has been pretty well ruled out. But serious deficiencies appear at the very next steps: the direct transfer of new advances into the marketplace, and their evolution and application to related products and processes. Here there is no doubt that other countries, especially Japan, are outperforming us.[12]

The problems associated with transferring the results of Federally funded R. & D. into the marketplace have also been discussed in several studies. For example, Professor William Abernathy of the Harvard Business School and Professor Balaji Chakravarthy of the University of Pennsylvania's Wharton School, have criticized current Federal R. & D. programs which emphasize "technology push" (i.e., direct government support for the development of new technologies) without a corresponding emphasis on "technology pull" (i.e., government provision of incentives for the use of new technologies by the private sector or by the government itself). They claim that "a predominantly technology push orientation is likely to be a failure" in stimulating innovation.[13]

The Small Business Innovation Research program embodied in S. 881 specifically addresses this problem by making market linkage where appropriate an explicit part of the program. It does this by giving special consideration in the funding review of Phase II pro-

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[11] Since the May 13, 1981 hearing, Dow Chemical Company has invested an additional $5 1 million in Collaborative Research, Inc , and Green Cross Corporation of Osaka, Japan, has invested $1 million.

[12] Washington Post editorial, Dec. 12, 1980.

[13] William Abernathy and Balaji Chakravarthy, "Government Intervention and Innovation in Industry: A Policy Framework," Sloan Management Review, (Spring, 1979), p. 15.

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posals to applicants who are successful in attracting private capital commitments to pursue commercial applications of the Federal research. This special consideration is given by awarding extra points of merit to those proposals that have attracted private sector commitments for follow-on funding. In other words, if two proposals are evaluated as being of approximately equal scientific and technical merit and feasibility and only one has an outside financial commitment to further pursue the research or to apply it for commercial purposes, the advantage (and presumably the award) would go to that proposal. The Committee believes that such an approach is necessary if we are to succeed in developing and applying the new technologies so crucial to the revitalization of our economy.

### B. DESIGN OF THE SMALL BUSINESS INNOVATION RESEARCH PROGRAM

Testimony from representatives of the small business community revealed that despite the vastly different types of Federal research conducted, small research firms encounter similar problems. The firms represented worked in areas ranging from biogenetics to laser technology, from robotics to plasma technology, from agricultural research to metallurgics. The problems faced by these companies include difficulty in raising seed capital to begin the research as well as difficulty in transferring the results of the research to the marketplace. The Small Business Innovation Research program established in S. 881 addresses both of these problems by providing start-up capital and by requiring that special consideration be given to proposals that show potential for commercial application.

Several witnesses praised the design of the National Science Foundation SBIR program upon which S. 881 is modeled. Stan Mason of Simco, Inc., a firm specializing in developing new products, testified that "without the NSF incentive, the fine reputation of the NSF and the careful hands-off yet experienced science policy guidance from the small business people at NSF, Simco would have never organized a program with such drive and care and precision on its own."

A recent General Accounting Office study concluded that the NSF SBIR program meets all the criteria necessary for innovation to occur. To meet these criteria, a program must: (1) encourage the exploitation of technological opportunity; (2) provide a mechanism to insure that the firm sponsoring the innovation has the managerial and technical capacity to support the innovation process; (3) provide a mechanism to insure adequate financial and human resources; and (4) encourage innovation in technologies and industries in which small businesses can be expected to assemble the necessary resources to support innovation.[14]

### C. SUGGESTED REVISIONS

*1. Set-Aside Provision*

Some witnesses expressed concern about the negative consequences which might ensue from the 1 percent set-aside provision in the legislation. Some were concerned that it would jeopardize the quality of

[14] "Consistent Criteria Are Needed to Assess Small Business Innovation Initiatives," (Government Accounting Office, July 7, 1981), pp. 32–40.

Some witnesses expressed concern about the negative consequences which might ensue from the 1 percent set-aside provision in the legislation. Some were concerned that it would jeopardize the quality of

[14] "Consistent Criteria Are Needed to Assess Small Business Innovation Initiatives," (Government Accounting Office, July 7, 1981), pp. 32–40.

Federal research. Dr. John A. DiBiaggio, president of the University of Connecticut and spokesman for the Association of American Universities, the National Association of State Universities and Land Grant Colleges, and the American Council of Education, argued that the 1 percent set-aside would lead to funding decisions not based on the merits of proposals. A related concern was voiced by Henry G. Kirshmann, Deputy Assistant Secretary for Grants and Procurement, Department of Health and Human Services. Mr. Kirshmann objected on the grounds that the set-aside would force "a suboptimal allocation of resources." He also questioned the capability of the small business community to do the kind of research funded by HHS.

The Committee believes that the concern over the quality of research funded under the program as well as the concern over the ability of small businesses to do the research is unwarranted. Since the legislation provides in certain instances that, after a three-year phase-in, only 1 percent of affected agencies' extramural research and development budgets will go toward funding small businesses, there should be a sufficient number of meritorious proposals submitted by the small business community to assure that only the highest quality of research is funded. Furthermore, each agency retains complete discretion in selecting the topics to be included in its program solicitations, as well as the individual proposals to be funded.

Richard DiCicco, President of Technology Catalysts, a firm which matches large companies with small high-technology research firms, testified that he had 9,613 small high-technology research firms on his data base and that 2,636 of these conducted research in the life sciences. Furthermore, his research indicated that the total number of small firms conducting research in the life sciences was close to 3,500.

Concerning the ability of small businesses to conduct high quality research, Ann Eskesen, Director of the Bently College Small Business Resources Center in Waltham, Massachusetts, told the Committee that "there is no evidence whatsoever that the standard (of the National Science Foundation SBIR proposals) has been lower" than those received from other sources. She went on to say that in her review of the program she found that the standard is "comparable, if not superior in many cases to that which is being received from the more traditional sources applying to the National Science Foundation."

There has been no evidence advanced to support the contention that small businesses are unable to conduct the same high quality research as others participating in Federal R. & D. programs. In fact, there is some reason to believe that the concern expressed over lower standards is a disguise for other fears. As Dr. Ronald Lamont-Havers of Massachusetts General Hospital told the Committee:

> What I would be concerned about . . . would be the fact that funds are then set-aside, protected funds, which would prevent one of our own investigators not being supported. That's all I'm concerned about whether or not there's funding. I'm concerned about protecting my own investigators as far as their funding, and any reduction in funds within that system is going to have a perturbation within our system.

At the July 16th hearing, Senator Rudman raised the question of the self-serving nature of the arguments opposing the one percent set-

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At the July 16th hearing, Senator Rudman raised the question of the self-serving nature of the arguments opposing the one percent set-

aside in the following exchange with Dr. William F. Raub, Associate Director for Extramural Research and Training, Department of Health and Human Services:

> Senator RUDMAN. I want to just point out to you that you have excluded private companies from some of your basic research for a period of 10 years. That is correct; is it not?
>
> Dr. RAUB. More than 10 years.
>
> Senator RUDMAN. You are guilty of the biggest set-aside of all. We live in a capitalistic society and you penalize people who want to do research, and possibly make money on it, as though there is something wrong with that. I think it is the height of gracelessness for people paid with tax dollars and universities which receive tax dollars essentially to attack the very system which provides them with the dollars which fund their research and their salaries.

To insure that the same high standards which apply to other Federal R. & D. programs also apply to the SBIR programs, the Committee amended the original bill by specifying that funding decisions be made on the basis of "scientific and technical merit and feasibility." (The original version required that such decisions be made on the basis of "technical and economic feasibility.") The potential for the application and commercialization of the Federal research enters into the evaluation process only as a tie breaker when it is necessary to choose between proposals of approximately equal merit and feasibility.

The Committee also strongly recommends that outside peer review be used wherever possible. Some agencies might choose to continue using their present stringent peer review procedures. At the very least, agencies should make every effort to use outside peer review in evaluating Phase II proposals. In addition, the Committee amended the orginial legislation by specifying that the Office of Science and Technology Policy (OSTP) oversee implementation of the SBIR programs in the Federal agencies. (See discussion of Lead Agency below.)

Along with the Department of Health and Human Services, the other agencies which testified on the bill were also concerned about the set-aside provision. Although supportive of the basic objectives and structure of the SBIR program prescribed in the legislation, the Department of Defense [15], the National Aeronautics and Space Administration, the Department of Energy, and the Small Business Administration opposed the 1 percent set-aside on the grounds that it would reduce funding flexibility. They recommended the adoption of flexible SBIR pilot programs instead.

The Committee feels that Congressional action is mandatory if agencies are ever to implement SBIR programs on any substantial basis. Without such action, there is reason to believe that today's good intentions will yield to tomorrow's bureaucratic inertia. The Committee notes that the Department of Energy, when appearing before the Committee on April 16, 1980, on similar legislation, testified that the Department would voluntarily establish an SBIR pilot program. To date, DOE has failed to take action in this regard.

[15] The Department of Defense recently implemented a Small Business Advanced Technology Program which is very similar in design to the SBIR program proposed in S. 881. (The establishment of this program would seem to indicate DoD's recognition that small businesses were not being used effectively.)

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The Committee further believes that a statutory set-aside is necessary if Federal SBIR programs are to succeed. While the original bill earmarked 1 percent of agencies' total R. & D. budgets for this purpose, the revised legislation exempts agencies in-house research and development expenditures before applying the 1 percent requirement. This was done so as not to require those agencies that conduct a substantial portion of their research in-house to commit a disproportionate reallocation to SBIR programs.

With this in-house exemption, the Committee believes that there is ample flexibility in each agency's R. & D. budgets to allow agencies to target 1 percent of their funds to implement SBIR programs. It is left to the agencies' discretion to decide which funds to use for this purpose. However, the Committee expects agencies to exercise this discretion in a manner that will not result in the disproportionate taxing of any single area of research. For example, there has been concern expressed that basic research in particular may, in some instances, be required to bear a greater share of the burden of funding SBIR programs. It is the Committee's intent that this not occur. The Committee believes that the funding of SBIR programs can be done without jeopardizing any of the research now being conducted.

Dr. Philip Speser of the Federation of American Scientists addressed this point directly. Calling S. 881 a "well-crafted bill," Dr. Speser told the Committee:

> Before the Federation became involved in this, we went through the agency budgets carefully and looked at the kinds of funding areas the agencies engaged in, and we compared the budgets overall for the agencies with the budgets which went to universities, and those which went to basic, applied, and development. We came to the conclusion there is plenty of flexibility in the agency budgets to include this program's 1 percent set aside, if you want to use that term, without jeopardizing, in fact, any of the research that the Federal Government does. It is our conclusion that much of the agency research if put through an SBIR program, would be done far more cost-effectively, which means we could do more rather than less research as a result of this program.

The Federation, which is comprised of over 5,000 natural and social scientists and engineers and includes one-half of the living U.S. Nobel laureates among its members, strongly endorsed the legislation.

Most witnesses supported the 1 percent set-aside. Jack Wilson, Director of Special Projects for the National Federation of Independent Business, thought nothing could be more reasonable than earmarking 1 percent of agencies R. & D. funds for the "nation's" innovators." Others thought the provision was too modest. Sherman Abrahamson, special assistant to the president of Control Data, told the committee that the figure should be closer to 20 percent. Congressman Berkley Bedell, Chairman of the Subcommittee on Energy, Environment and Safety Issues Affecting Small Business of the House Small Business Committee, thought a 50 percent set-aside would be appropriate. And Dr. Lee Shevel of the Whitehall Group, and NSF SBIR program winner and the former president of OMEX, a company specializing in information technology, viewed it this way:

Small Business Committee, thought a 50 percent set-aside would be appropriate. And Dr. Lee Shevel of the Whitehall Group, and NSF SBIR program winner and the former president of OMEX, a company specializing in information technology, viewed it this way:

> It could be argued that one percent is not large enough to make a difference. But when considering that small businesses with different motivations can achieve enormous gains in efficiency in the use of R. & D. funds as compared to larger companies, it isn't too small. That is, if you measure the effectiveness of those funds against the usual scale of the large company, you could conclude it's too small. But when you take into account how those funds are guided and spent and the enormous improvement in efficiency, then it's not to small * * * On the other hand, you could argue that it's too large as I understand OMB is suggesting these days. They contend that small businesses cannot absorb and utilize such funds. Such judgment is ludicrous when we consider the size and capacity of small business in this country.

After full consideration, the Committee decided that 1 percent of agencies' R. & D. budgets, exempting in-house research, was an appropriate amount to fund the SBIR programs. The Committee believes that this level of funding channels adequate resources into agency SBIR programs to take advantage of the proven capabilities of small businesses without reducing an agency's flexibility to pursue its own research requirements.

The Committee wishes to emphasize that the 1 percent figure prescribed in the legislation for funding SBIR programs is to be considered the minimum rather than the maximum amount required for these programs. The Committee fully intends that this amount be in addition to the Federal R. & D. monies otherwise received by small businesses. The Committee urges agencies to increase this funding wherever experience warrants it.

Given the past reluctance of certain agencies to encourage full participation by small businesses in Federal R. & D. programs, the Committee is concerned that some agencies will use the SBIR program as a substitute rather than as an additional vehicle to engage small businesses in their R. & D. programs. The Committee does not intend that SBIR programs divert funds now going to small businesses under general R. & D. procurement. Rather, the legislation seeks to increase the total amount of R. & D. monies received by small businesses by at least the amount provided for in the legislation.

The Committee will actively pursue oversight hearings to insure that agencies comply with this Congressional directive. Agencies should therefore maintain the appropriate data to allow Congress to evaluate the methods or programs under which small businesses receive R. & D. monies. The Committee feels strongly that agencies comply with the requirements of this Act by establishing SBIR programs consistent with the clear intent and philosophy of the legislation.

The Committee is particularly concerned that the Department of Energy comply with the letter and spirit of S. 881. Numerous General Accounting Office reports, as well as recent hearings held by both the Senate and House Small Business Committees, demonstrate that the Department of Energy has a very poor record of encouraging small businesses to participate in its procurement programs. This is especially true with respect to solar energy, a field tailor-made for small businesses and the SBIR program.

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For example, a November 1979 GAO report found that the Department's contracting practices avoid and often limit competition. Another GAO report on DOE's solar energy program stated that the Department of Energy needs to take additional steps to encourage small business participation in its solar energy programs. A House Small Business Committee report identified several areas for future improvements in DOE procurement practices, including DOE's complicated and lengthy requests for procurement, the difficulties faced by small businesses with limited resources in preparing contract solicitations, the delays in awarding contracts, and the bias of contracting officers toward large businesses.

The SBIR program established in S. 881 offers the Secretary of Energy an excellent opportunity to alleviate the continuing need for government intervention in solar energy and conservation as well as in the production of alternative sources of energy. The program is designed to fund innovative proposals that have clear market potential, not to provide hand-outs to small businesses. With the broad flexibility provided by the legislation, the Secretary of Energy, in particular, has the opportunity to encourage the development of emerging technologies such as renewable energy. This should result in the creation of new jobs and the prospering of small businesses along with the diminution of DOE's role of subsiding energy industries.

The Committee expects the Department to take all appropriate steps to insure that a wide range of technologies are solicited under this program and that the small business community is given the maximum opportunity to participate.

*2. Lead Agency*

Another major concern of witnesses testifying on the legislation was the role of the Small Business Administration as the lead agency to oversee the SBIR program as provided in the original bill. The agencies, in particular, felt that SBA was unsuited to serve as the lead agency for oversight of Federal research activities. Dr. Philip Speser of the Federation of American Scientists also raised questions about this role for SBA. He told the Committee:

> We feel that the Small Business Administration lacks sufficient experience in dealing with complicated issues of science policy to function as the sole lead agency for implementing this legislation. We urge you to place those functions which require scientific expertise in either the Commerce Department or an inter-agency group overseen by the Office of Science and Technology Policy.

After considering a number of alternatives, the Committee decided to charge the Office of Science and Technology Policy (OSTP) with the primary responsibility for overseeing the implementation of the SBIR programs in the Federal agencies. This responsibility is to be carried out with the assistance of the Federal Coordinating Council for Science, Engineering and Research, composed of the top research and development personnel of the Federal agencies. The Committee feels that OSTP is an appropriate overseer of the SBIR programs since it understands the research needs and objectives of the Federal agencies. The President's Science Advisor, who heads OSTP, can and



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should assure that the program is responsive to Congressional and Administration priorities. As formulator of our nation's science and technology policy, OSTP is in a unique coordinating position to insure that the SBIR programs are conducted in a manner that will benefit the Federal agencies as well as the general economy.

The Committee believes the Small Business Administration also has an important part to play in the total Federal effort to open research and development opportunities to small businesses. The legislation directs SBA to develop and maintain a source file and an information program to assist small businesses interested in participating in the SBIR programs. It also requires the Administration to provide the Federal agencies with information concerning small businesses. In addition, SBA is responsible for coordinating with the agencies the timing of the release of SBIR solicitations and for making publicly available a master release schedule of such solicitations to assist small businesses interested in participating in SBIR programs.

While the Office of Science and Technology Policy is given the lead oversight role, the Small Business Administration is also responsible for insuring the success of the SBIR programs. SBA is further responsible for seeing that the interests of small businesses are protected. In carrying out these respective functions, the Committee does not expect either OSTP or SBA to specifically audit the individual agencies participating in SBIR programs. Rather, OSTP and SBA may rely on reports furnished directly to them by the agencies.

The agencies conducting SBIR programs must report annually to both the Office of Science and Technology Policy and the Small Business Administration concerning the conduct of these programs. These reports are to be reviewed independently by both OSTP and SBA which must, in turn, report annually on their review of the reports to the Senate and House Committees on Small Business.

*3. Other changes*

In addition to the concern over the 1 percent set-aside and the role of the Small Business Administration as the lead agency, several other suggestions for improving the legislation were made during the hearings. These included suggestions for a change in the definition of research and development to conform with the definition currently used by the Office of Management and Budget, and a change in the language requiring agencies to set goals for funding general small business research and development. Both these changes are incorporated in the amended bill. The definition of research and development is now consistent with that used in OMB Circular A–11, Section 44. The goals prescribed for funding for small business research and development are now based on a percentage figure rather than a dollar figure as they previously were.

There was also some concern expressed over the different needs of different agencies. For example, the National Aeronautics and Space Administration testified that as a mission agency, it had procurement concerns which did not apply to non-mission agencies such as NSF or NIH. Testimony also addressed the need for appropriate and uniform regulations. Dr. Philip Speser of the Federation of American Scientists suggested that the Committee "require the scientific lead agency

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to adopt regulations covering the form of proposals, outside peer review of proposals, protection of proprietary information and data generated in performance of the funding agreement, cost sharing, and disposal of property provided by the agency." The Committee accepted these suggestions and incorporated them in the revised bill in a way that takes into account the different missions and requirements of the affected agencies and the importance of uniformity for participating small businesses.

### D. BENEFITS FROM THE LEGISLATION

The Committee believes that a number of economic and other benefits will result from extending the NSF SBIR program to other Federal agencies. In addition to creating new jobs and tax revenues, the legislation should increase research in the private sector which should in turn lead to the development and use of new and better products.

Several witnesses before the Committee attested to their own success in attracting follow-on capital to pursue further research as a result of their participation in the NSF program. Dr. Lee Shevel, the former president of OMEX, a company specializing in information technology, noted that OMEX's success under the NSF program enabled it to attract private sector funding commitments of $500,000 during Phase I and $3 million during Phase II. Dr. Orrie M. Friedman, president of the biotechnology firm, Collaborative Research, Inc., said that his success under the program led to $5 million in follow-on capital from Dow Chemical Company. And Dr. Charles Rosen, president of Machine Intelligence Corporation, told the Committee that as a result of a $25,000 grant from NSF, his company was able to raise $600,000 from one venture capitalist and that another venture capitalist subsequently invested $5 million.

The National Science Foundation estimates that its 1977 solicitation alone enabled participating companies to attract $23 million in private sector funding—over four times the Foundation's outlay for that year. The success of the SBIR program in this one agency provides good cause for optimism concerning the outcome of extending it government-wide.

Testimony at the hearings also highlighted big business support for S. 881. John Tillinghast Senior Vice-President for Technology at Wheelabrator-Frye, Inc., in Hampton, New Hampshire, told the Committee that his company stood to gain by the legislation since competition was the key to stimulating innovation throughout the economy.

Regarding the differences between large and small firms concerning innovative research, Mr. Tillinghast testified as follows:

> The statistics certainly support the contention that a disproportionately large number of new technological developments come from small firms . . . The fundamental question is why does this occur and how can this characteristic be strengthened? It is my belief that a great deal of the creativity of the small firms comes from their relatively unstructured organization and from the thirst of a few, bright, highly motivated people to gain more knowledge and to have

> ity of the small firms comes from their relatively unstructured organization and from the thirst of a few, bright, highly motivated people to gain more knowledge and to have

> better fundamental understanding. In the smaller firms, unlike the larger corporations, in some instances, each step does not have to be justified in terms of potential market share or gross operating margins or some other financial criteria. How can a financial control system evaluate market share when new technology is creating a wholly new market that does not yet exist? As part of the unstructured nature of the smaller firms, I believe that innovation occurs from creative flights of intellectual invention. Innovation does not come by the formula approach.

Sherman Abrahamson, special assistant to the president of Control Data, said that while large companies were good at many things, innovation was not one of them. He told the Committee that innovation is "the foundation of both our domestic prosperity and our international competitiveness." He said further that one of Control Data's major corporate strategies was to assist innovative small business and to find ways to assure their successful growth. Finally, Robert Benjamin, member of the Board of Directors of Delorean Motor Company, praised the design of the SBIR program contained in S. 881 and applauded its sensitivity to small business needs. He concluded his testimony as follows:

> Small business, with its inherent ability to encourage the individual manager, engineer, and company owner to develop new ways of producing existing products and to create new products is the most promising approach I see today towards again building up our industrial base, decreasing our dependence on foreign energy supplies, and creating more interesting jobs for our people.

Testimony also indicated that the Federal agencies can expect significant benefits from this legislation. Robert F. Trimble, Deputy Under Secretary of Defense for Research and Engineering, told the Committee:

> In summary, we wholeheartedly support the objectives of S. 881 to require agencies to establish a small business innovation research program, as we believe this concept to be the most far-reaching initiatives to date to bring small, innovative, high-technology firms into the Federal Government's Procurement process for research and development products and services. Our conviction on the soundness of this program is evidenced by the fact that we have already initiated an almost identical program.

In summary, the Committee views S. 881 as an important step forward in our efforts to revitalize the economy. It is well suited to the President's initiative to increase reliance on the private sector. At a minimum, enactment of the bill should result in the creation of the new technologies so crucially needed both within and without the Federal Government. Further, since small businesses have the fastest rates of growth in sales, exports, job creation, and productivity found in the economy, the Committee believes that the legislation holds the potential for many far-reaching benefits for the Nation at minimal Federal cost.

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## Regulatory Impact

In compliance with Rule XXVI(11)(b) of the Standing Rules of the Senate, it is the Committee's belief that S. 881 will have no regulatory nor privacy impact on the small businesses affected by the legislation.

The simple standardized formats prescribed for use in the Small Business Innovation Research programs should reduce substantially the paperwork requirements of small businesses participating in these programs.

## Estimated Cost

U.S. Congress,
Congressional Budget Office,
*Washington, D.C., September 24, 1981.*

Hon. Lowell P. Weicker, Jr.,
*Chairman, Committee on Small Business, U.S. Senate, Russell Senate Building, Washington, D.C.*

Dear Mr. Chairman: Pursuant to Section 403 of the Congressional Budget Act of 1974, the Congressional Budget Office has prepared the attached cost estimate for S. 881, the Small Business Act of 1981.

Should the Committee so desire, we would be pleased to provide further details on this estimate.

Sincerely,

Alice M. Rivlin, *Director.*

### Congressional Budget Office—Cost Estimate

1. Bill number: S. 881.
2. Bill title: Small Business Act of 1981.
3. Bill status: As ordered reported by the Senate Committee on Small Business, September 22, 1981.
4. Bill purpose: S. 881 would require several major federal departments and agencies to establish Small Business Innovation Research Programs (SBIR) beginning in fiscal year 1982, by targeting specified amounts of research and development (R. & D.) funds to small businesses. Each qualifying agency would be required to allocate a percentage of its R. & D. budget for the SBIR program. Initially, the percentage amount would vary by the size of the R. & D. budget; by 1984, however, a 1 percent minimum would be required for all qualifying agencies. In addition, each federal agency with an R. & D. budget exceeding $100 million would be required to set goals for allocation of funding agreements to small businesses.

As provided in S. 881, the Small Business Administration (SBA) would have responsibility for publicizing and coordinating a release schedule for SBIR solicitations, and for preparing an annual report to the Congress on the status of the SBIR programs. The Office of Federal Procurement Policy (OFPP), in conjunction with other agencies, would be required to issue regulations affecting various SBIR activities, while the Office of Science and Technology Policy would be responsible for monitoring and oversight.

5. Cost estimate: Although S. 881 specifically states that no appropriation of funds is authorized by this bill, nonetheless, certain costs,

would be required to issue regulations affecting various SBIR activities, while the Office of Science and Technology Policy would be responsible for monitoring and oversight.

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which are shown in the following table, will be incurred by federal agencies in order to implement the bill.

| | *Millions* |
|---|---|
| Estimated authorization level: | |
| Fiscal year: | |
| 1982 | $6 |
| 1983 | 11 |
| 1984 | 18 |
| 1985 | 20 |
| 1986 | 21 |
| Estimated outlays: | |
| Fiscal year: | |
| 1982 | 3 |
| 1983 | 9 |
| 1984 | 17 |
| 1985 | 19 |
| 1986 | 20 |

Portions of the cost of this bill would fall within nearly all the budget functions.

6. Basis of estimate: Shown below is a projection of the federal R&D budget through 1986, based on 1982 levels, as well as the estimated set-aside for the SBIR programs.

| | *Millions* |
|---|---|
| Estimated R. & D. obligations: [1] | |
| Fiscal year: | |
| 1982 | $30,100 |
| 1983 | 32,800 |
| 1984 | 35,500 |
| 1985 | 38,400 |
| 1986 | 41,300 |
| Estimated set-aside: | |
| Fiscal year: | |
| 1982 | 75 |
| 1983 | 205 |
| 1984 | 355 |
| 1985 | 385 |
| 1986 | 415 |

[1] Includes funds for only those agencies that would be required to establish an SBIR program; excludes "in-house" R. & D.

The total estimated R. & D. budget for 1982 is based on data supplied by those agencies that would be required to establish an SBIR program. They include the Defense Department-military functions; the National Aeronautics and Space Administration; the National Science Foundation; and the Departments of Health and Human Services, Agriculture, and Energy. It reflects the Administration's current budget request, although possible budget cuts may reduce these amounts somewhat.

For purposes of this estimate, 1983 through 1986 R. & D. obligations were projected on a current policy basis, using defense and nondefense inflators consistent with first budget resolution economic assumptions. The estimated set-aside for the SBIR programs was based on the formula specified in the bill.

Assuming a date of enactment on or around the beginning of November 1981, it is estimated that agencies could begin obligating funds for Phase I of their SBIR program before the end of fiscal year 1982.

Since guidelines of the SBIR programs are not specified in the bill, but rather would be developed in the first 120 days following enact-

vember 1981, it is estimated that agencies could begin obligating funds for Phase I of their SBIR program before the end of fiscal year 1982.

Since guidelines of the SBIR programs are not specified in the bill, but rather would be developed in the first 120 days following enact-

ment, it is not totally clear at this time how the SBIR program would operate within each agency. Based on information supplied by the agencies, it was assumed that more agencies would develop programs similar to that currently operated by the National Science Foundation.

Assuming this model, each agency would establish a separate SBIR office, with responsibility for coordination and implementation of the SBIR activities. This staff would work with agency personnel to determine the appropriate R. & D. categories for solicitations, develop and coordinate with SBA the release schedules, and report annually to SBA on the status of the program. In addition, agency personnel would be required to receive and evaluate proposals, select recipients, and administer funding agreements—which would involve conducting negotiations, awarding contracts, making payments based on contract progress, and monitoring and tracking the program records. It was also assumed that agencies would need to reprogram their current tracking systems over the next two years, since the data necessary for the bill's reporting requirements are not uniformly available.

Based on these assumptions, it is estimated that the total outlays in those agencies required by the bill to establish an SBIR program would be approximately $3 million in fiscal year 1982, $9 million in fiscal year 1983, $17 million in fiscal year 1984, $19 million in fiscal year 1985, and $21 million in fiscal year 1986. These costs, although not authorized by the bill, represent the incremental costs to the agencies to implement an SBIR program. They assume that each year an additional phase will be operational, so that by fiscal year 1984 the SBIR program would be fully operational.

It is very difficult to precisely measure the incremental costs at this time, however. The number and size of the awards, relative to current law, have a significant effect upon the administrative costs of the bill. For example, if, under current law, an agency would have awarded one $5 million contract, but as a result of S. 881 would now award 100 contracts for $50,000 each, additional resources would be required to manage and monitor these additional contracts. It is expected that guidelines will be developed and agencies will implement SBIR programs that satisfy the intent of the bill, as well as minimize the administrative burden to the agencies and small businesses.

In addition to the cost of the SBIR programs within these agencies, it is estimated that approximately $0.2 million in fiscal year 1982 and $0.3 million in each fiscal year thereafter will be required by those federal agencies that have responsibility for issuing policy directives, coordinating, monitoring, and reporting to the Congress. This assumes that the Office of Science and Technology Policy will simply review agency reports and not conduct independent audits in order to fulfill its oversight mandate.

Finally, while it is nto possible to estimate their impact, two additional factors could affect the long-term cost of the bill. Some studies suggest that small firms make a significant contribution to innovations, and that the cost per R. & D. scientist is less in a smaller firm. If this is true, some savings may be obtained in the long-term by directing

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more R. & D. spending to small businesses. On the other hand, in some areas only a few small firms might be qualified to perform the work, and lack of competition could result in higher costs.

7. Estimate comparison: None.

8. Previous CBO estimate: On September 21, 1981, the CBO prepared a cost estimate for a committee print of S. 881 for the Senate Committee on Small Business. In the previous estimate, the estimated cost was slightly less in fiscal years 1982 and 1983 because of a different formula for set-asides.

9. Estimate prepared by: Mary Maginniss.

10. Estimate approved by:

C. G. NUCKOLS
(For James L. Blum, Assistant Director for Budget Analysis).

## COMMITTEE VOTE

With a quorum present, the Committee, by voice vote, ordered S. 881 favorably reported subject to amendment during Committee consideration. Upon completion of Committee consideration, and in compliance with Rule XXVI (7) (C) of the Standing Rules of the Senate, the following roll call vote was recorded:

On S. 881, the Small Business Innovation Research Act of 1981, was ordered favorably reported with an amendment in the nature of a substitute.

AYES—16

Weicker
Packwood [1]
Hatch
Hayakawa
Boschwitz
Gorton
Nickles [1]
Rudman
D'Amato [1]
Nunn
Huddleston [1]
Sasser [1]
Baucus [1]
Levin [1]
Tsongas [1]
Dixon [1]

NAYS—0

[1] Proxy

## SECTION-BY-SECTION ANALYSIS

Section 1 provides that this Act may be cited as the "Small Business Innovation Research Act of 1981."

Section 2 sets forth Congressional findings and states the purposes of the Act.

Section 3 amends Section 9 of the Small Business Act as follows:

Subsection 3(1) provides conforming amendments to Section 9 of the Small Business Act redesignating subsections (c) and (d) as (g) and (h) respectively.

ness Innovation Research Act of 1981."

Section 2 sets forth Congressional findings and states the purposes of the Act.

Section 3 amends Section 9 of the Small Business Act as follows:

Subsection 3(1) provides conforming amendments to Section 9 of the Small Business Act redesignating subsections (c) and (d) as (g) and (h) respectively.

Subsection 3(2) strikes existing subsection (b) of Section 9 of the Small Business Act and adds the following new material:

New subsections (b)(1), (2), and (3) restate the language currently found in Section 9(b) of the Small Business Act.

New subsection (b)(4) requires the Small Business Administration to develop and maintain an information program and a source file, including the utilization of the automated procurement source system (PASS), to assist small businesses interested in participating in the Small Business Innovation Research (SBIR) programs. This information program and source file, including PASS, are also to be used to assist Federal agencies required to establish SBIR programs by identifying potential participants for these programs.

The Committee recognizes that the success of the SBIR programs established under this Act requires the participation of the most qualified science and technology based small businesses. The Small Business Administration is well-positioned to reach small businesses capable of conducting research and development and to maintain a source file of these firms to share with the Federal agencies operating SBIR programs. The Administration's existing PASS system is an excellent initial resource for this purpose. However, the Committee urges SBA not to limit its outreach to those firms already listed in PASS. Since one of the purposes of the Act is to encourage the start-up of new companies, the Small Business Administration should develop ways to inform scientific, engineering and other potential small business innovators about the opportunities existing within each of the SBIR programs.

The Small Business Administration should also develop and maintain a program to provide information to the small business community concerning the operation of SBIR programs, the procedures for participating in such programs, and schedules for SBIR solicitations and proposal submission deadlines. The SBA should also provide information concerning the regulations implementing these programs in the specific agencies.

New subsection (b)(5) requires the Small Business Administration to coordinate with agencies conducting SBIR programs on the release of their program solicitations and further requires SBA to compile and make publicly available a master release schedule of all forthcoming agency SBIR program solicitations. The Committee does not intend for SBA to establish the actual schedules for release of individual agency SBIR program solicitations but rather to encourage agencies to release such solicitations in a manner that will permit the maximum participation in multiple SBIR programs by the small business community. Agencies should be encouraged to release their SBIR program solicitations around the same time each year and to coordinate their release dates with SBA and with other agencies conducting SBIR programs in order to stagger the times that the various solicitations are issued. Regularized release schedules will assist those interested in participating in particular SBIR programs by allowing them to plan for the preparation of proposals as well as for the conduct of the desired research. The release of agencies' program solicitations at different times throughout the year should also facilitate the ability of small businesses to participate in more than one SBIR program.

ested in participating in particular SBIR programs by allowing them to plan for the preparation of proposals as well as for the conduct of the desired research. The release of agencies' program solicitations at different times throughout the year should also facilitate the ability of small businesses to participate in more than one SBIR program.

This subsection also requires the Small Business Administration to prepare a master release schedule of all agency SBIR program solicitations and to provide this schedule to small businesses interested in participating in SBIR programs. To the extent practicable, SBA should also notify those interested in participating in SBIR programs of any changes in the release schedules.

New subsection (b)(6) requires the Small Business Administration to independently review the agencies' annual reports on the SBIR programs and to report not less than annually to the Senate and House Committees on Small Business on its review of such reports and actions taken by the agencies to implement the SBIR programs, together with such recommendations as the SBA Administrator may deem appropriate. The Committee also expects the SBA to assess the impact of the SBIR programs on the small business community.

New subsection (c)(1) requires each Federal agency with total obligations for research or research and development in excess of $100,000,000 in fiscal year 1980 or any subsequent fiscal year, based upon the National Science Foundation's Federal Funds for Research and Development Series, to comply with the provisions of subparagraphs (A), (B) and (C).

Subparagraph (A) of new subsection (c)(1) specifies that each agency shall unilaterally establish and report annually to the Director of the Office of Science and Technology Policy and the Small Business Administration goals for funding agreements in excess of $10,000 for research or research and development with small business concerns. These goals shall not be less than the percentage of the total research and development funds awarded to small businesses in the preceding fiscal year. Obligations incurred pursuant to an SBIR program shall not be counted as meeting any portion of these goals. The subparagraph prescribes that agencies establish these goals "unilaterally" so as to make it clear that it is not necessary for them to consult with SBA or any other agency in this regard.

Subparagraph (B) of new subsection (c)(1) requires an agency to establish an SBIR program pursuant to the requirements of new subsection (d) if after application of the formula prescribed in new subsection (c)(2), one percent of the amount available for obligation for research or research and development in teh fiscal year in questions is equal to or greater than $3,000,000. Despite the desirability of establishing an SBIR program in all Federal agencies to maximize the opportunities for small businesses, the Committee believes that it would not be cost-efficient to require agencies to implement SBIR programs with less than $3 million available for such purpose.

Subparagraph (C) of new subsection (c)(1) requires agencies to report annually to the Director or the Office of Science and Technology Policy and to the Small Business Administration on actions taken to implement the Small Business Innovation Research Act of 1981, including a report on goals established pursuant to subparagraph (A), the individual number of research or research and development grants, contracts, and cooperative agreements awards in excess of $10.000, the total dollar value of all such awards, and an identification of SBIR awards. This subparagraph also requires agencies to compare the number and dollar amount of all research or research and development

cluding a report on goals established pursuant to subparagraph (A), the individual number of research or research and development grants, contracts, and cooperative agreements awards in excess of $10.000, the total dollar value of all such awards, and an identification of SBIR awards. This subparagraph also requires agencies to compare the number and dollar amount of all research or research and development

awards in excess of $10,000 with all such awards to other than small business concerns.

New subsection (c)(2) defines the "amount available for obligation for research or research and development" upon which the requirements for funding the SBIR programs established in new subsection (d)(1) are based. Each agency will determine this figure annually by analyzing its actual obligations for the most recent fiscal year for which data is available. This data will include the percentage of an agencies' total obligation for research or research and development which was utilized for research or research and development conducted outside the Federal Government or funded through government-owned, contractor-operated facilities. The total amount available for obligation for research or research and development for the year in question in any given agency is then multiplied by this percentage.

New subsection (d)(1) specifies that each agency required to establish an SBIR program pursuant to subparagraph (B) of new subsection (c)(1) shall make available for such program, and for no other purpose, an amount not less than 20 percent of the one percent figure arrived at pursuant to subparagraph (B) of new subsection (c)(1) in the first fiscal year of its SBIR program, not less than 60 percent of such figure in the second fiscal year, and not less than the one percent figure in all subsequent fiscal years. This subsection also specifies that any agency which is required to establish an SBIR program pursuant to subparagraph (B) of new subsection (c)(1) but which had total obligations for research or research and development of $2,000,000,000 or less in the preceding fiscal year shall make available for its SBIR program the total one percent arrived at pursuant to subparagraph (B) of new subsection (c)(1) in the first and every fiscal year of its SBIR program.

The Committee believes that agencies subject to this requirement, such as the Department of Agriculture and the National Science Foundation, are fully able to effectively use the entire one percent amount in the first year of the program. The Committee estimates that DOA will be required to spend approximately $3 million in the first year, while NSF will merely increase the funding for its existing SBIR program.

New subsection (d)(2) directs agencies establishing SBIR programs to select topics to be included in their SBIR program solicitations that are appropriate to each agency's individual research and development needs. Agencies are given full discretion to decide what kinds of research and development topics they want to include in their SBIR programs.

New subsection (d)(3) requires agencies establishing SBIR programs to issue and make publicly available their SBIR program solicitations in accordance with a schedule coordinated with the Small Business Administration and other agencies conducting SBIR programs. While each agency is allowed to set the release dates of its own SBIR program solicitations, the Committee expects agencies to coordinate the release of these solicitations with SBA and other agencies conducting SBIR programs so as to maximize small business opportunities to participate in these programs. The major procuring agencies such as the Department of Defense and the National Aeronautics

SBIR program solicitations, the Committee expects agencies to coordinate the release of these solicitations with SBA and other agencies conducting SBIR programs so as to maximize small business opportunities to participate in these programs. The major procuring agencies such as the Department of Defense and the National Aeronautics

and Space Administration should make every effort to release their solicitations at least two months apart in order to give small businesses desiring to participate in both programs an opportunity to do so.

Agencies should also attempt to distribute these solicitations as broadly as possible in order to promote maximum participation in the SBIR programs.

New Subsection (d)(4) requires that agencies receive and evaluate proposals received pursuant to SBIR program solicitations. Proposals are to be evaluated in accordance with the requirements of the SBIR program as established in the Small Business Innovation Research Act of 1981.

New subsection (d)(5) directs agencies to select small businesses responsive to solicitations to fund proposals under the SBIR program. Selections are to be made in accordance with the requirements of the SBIR program as established in the Small Business Innovation Research Act of 1981 based upon the agency's own determination of research priorities.

New subsection (d)(6) directs agencies to make payments to recipients of SBIR funding agreements on the basis of progress toward, or the completion of, the funding agreement requirements. This gives agencies the flexibility to establish their own payment schedules and enables them to consider the cash flow needs of recipients.

New subsection (d)(7) directs agencies to consult with the Office of Federal Procurement Policy before establishing, by agency rule, uniform procedures for complying with the requirements of the Small Business Innovation Research Act of 1981. These procedures are to implement fully the policy directives issued by the Office of Federal Procurement Policy pursuant to new subsection (e).

The last sentence of new subsection (d) specifies that funding agreements with small business concerns for research or research and development which result from selections other than pursuant to SBIR program solicitations shall not be counted as meeting any of the percentage funding requirements for SBIR programs.

New subsection (e) directs the Administrator of the Office of Federal Procurement Policy, after consultation with the Director of the Office of Science and Technology Policy, the International Affairs Division of the Office of Management and Budget, and the Small Business Administration, to issue policy directives for the general conduct of the SBIR programs within one hundred and twenty days of the enactment of the Small Business Innovation Research Act of 1981. Since the Office of Science and Technology Policy (OSTP) has no administrative responsibilities, and as OFPP has responsibilities for Federal procurement policy, the Committee decided that the Office of Federal Procurement Policy (OFPP) was the appropriate entity to issue the policy directives. However, since the SBIR programs will be tailored to the research and development objectives of the individual agencies and funds with both grant and contract money, the Committee felt that the International Affairs Division of the Office of Management and Budget which oversees grant programs should be consulted when establishing general guidelines for the conduct of the SBIR programs.

felt that the International Affairs Division of the Office of Management and Budget which oversees grant programs should be consulted when establishing general guidelines for the conduct of the SBIR programs.

New subsection (e)(1) specifies that the policy directives issued by OFPP are to provide for a uniform SBIR solicitation format. The Committee expects agenices to make every effort to adopt uniform program solicitations, including standardized formats for submission of Phase I and Phase II proposals. Such uniformity will make it easier for small businesses wishing to participate in more than one SBIR program.

New Subsection (e)(2) specifies that the policy directives issued by OFPP also provide for the timely receipt and review of proposals. Timely receipt and review of proposals is essential if the SBIR programs are to achieve the goals of the legislation. The Committee therefore recommends that no more than six months elapse between the deadline for the receipt of Phase I proposals and the granting of SBIR awards, and no more than six months pass between the completion of Phase I funding agreements and the funding of Phase II proposals.

Subparagraph (A) of new subsection (e)(3) specifies that the policy directives issued by OFPP provide for a funding process which includes outside peer review where appropriate. The Committee urges agencies to use outside peer review in evaluating both Phase I and Phase II proposals where appropriate. At the very least, agencies should adhere to their existing review standards in evaluating the type of research and development which will be funded under SBIR programs.

Subparagraph (B) of new subsection (e)(3) specifies that the policy directives issued by OFPP provide for a funding process which includes the protection of small business interests regarding data generated in the performance of funding agreements. For many years, it has been the practice of the Federal Government in awarding research and development grants to non-profit organizations to require periodic and final performance reports or both. However, detailed technical data and information which is unnecessary to an understanding of the scientific findings disclosed in the performance reports has not been required.

This practice is consistent with the theory of grants embodied in the Federal Grants and Cooperative Agreements Act (P.L. 95–244) in that the performance report is intended to explain the results of the research without burdening the grant recipients with the administrative requirements of maintaining and delivering technical information which is of little or no value to the government. Further, to the extent that such technical data may gain some value in the commercial marketplace, the Committee believes that its possession by the grant recipient would be more likely to result in its ultimate use than its possession by the government. This is also consistent with the general view that grants are awarded for the purpose of stimulating a public need rather than for obtaining a service or product for government use.

While past practices support only the submission of performance reports as a condition of a grant, the circumstances of a contract may require the negotiation and delivery of technical data generated in performance of the contract. Such information may be necessary in order for an agency to fulfill its mission through the purchase of

performance of the contract. Such information may be necessary in order for an agency to fulfill its mission through the purchase of

services or a product through competitive procurement. This practice is consistent with the theory of contracts embodied in the Patent Trademark Amendments of 1980 (Public Law 95–224) in that the acquisition of technical data and its future use is intended to directly benefit the Federal Government.

It is the Committee's expectation that this approach to information generated in the performance of funding agreements will be reflected in the regulations.

Subparagraph (C) of new subsection (e)(3) specifies that the policy directives issued by OFPP provide for a funding process which includes the transfer of title to property provided by the agency to the small business concern where such transfer would be more cost-efficient than the recovery of the property by the agency. Under current procedures, the transfer of property provided by agencies for purposes of extramural research and development tends to be limited to funding agreements with nonprofit entities. The Committee recognizes the basic validity of this approach and believes that, in most instances, profit-seeking organizations should bear the costs associated with their market-related activities. However, the reclamation of property provided to profit-makers has sometimes led to cost-inefficiency on the part of the government. For this reason, the Committee believes that where the Federal Government can purchase new equipment for the same amount or less than the cost of recovering equipment provided to small businesses under SBIR programs, title should be transferred to the small business.

Subparagraph (D) of new subsection (e)(3) specifies that the policy directives issued by OFPP provide for a funding process which includes attention to cost principles. In contrast with many large profit and nonprofit institutions which often achieve "economies of scale" by participating in several Federal programs at one time, small businesses tend to focus on a single contract with a correspondingly greater overhead. For this reason, cost principles established for SBIR programs should take into account the importance of providing full and adequate renumeration for R. & D. services provided to the Federal government. These principles should address such matters as the costs associated with preparing and submitting successful proposals, cost-sharing on the basis of the ability of the small business to assume such costs, and the interest incurred due to the government's failure to meet scheduled payments under the SBIR funding agreements.

Subparagraph (E) of new subsection (e)(3) specifies that the policy directives issued by OFPP provide for a funding process which provides for payments to recipients of SBIR funding agreements on the basis of progress toward or completion of the funding agreement requirements. The Committee strongly urges that SBIR payment schedules take into account the limited cash flows of small businesses. Payment schedules should not place burdens on firms which would require them to seek short-term infusions of capital in order to continue or complete the research funded under an SBIR program.

New subsection (e)(4) specifies that the policy directives issued by OFPP provide a format for agencies to use in establishing small business goals for research or research and development funding agreements in excess of $10,000.

New subsection (e)(4) specifies that the policy directives issued by OFPP provide a format for agencies to use in establishing small business goals for research or research and development funding agreements in excess of $10,000.

New subsection (e)(5) specifies that the policy directives issued by OFPP provide a format for agency annual reports. These reports will include information on goals established as well as information concerning the conduct of SBIR programs. Agency uniformity in reporting will assist both the Office of Science and Technology Policy and the Small Business Administration in their independent review of the annual reports, and the Congress in its oversight responsibility.

New subsection (e)(6) specifies that the policy directives issued by OFPP provide for the timely submission of agency annual reports to the Director of the Office of Science and Technology Policy and to the Small Business Administration. The Committee expects agencies to make every effort to submit their reports on the SBIR Programs to OSTP and SBA in ample time for both agencies to review the reports and to meet their mandate to report annually to the Senate and House Committees on Small Business on that review.

The language at the end of new subsection (e)(6) directs the Administrator of OFPP, in developing the policy directives prescribed under new subsection (e), to seek conformity with the Federal Grants and Cooperative Agreements Act of 1977 and with the formation of a single, simplified, uniform procurement regulation pursuant to the Office of Federal Procurement Policy Act, and with Public Law 95-507.

New subsection (f)(1) instructs the Director of the Office of Science and Technology Policy, in consultation with the Federal Coordinating Council for Science, Engineering and Research to independently review and monitor all phases of the implementation and operation of SBIR programs within agencies required to establish such programs, including compliance with the expenditure of funds according to the requirements of new subsection (d)(1). The Committee does not intend that OSTP actually audit agencies conducting SBIR programs but rather that it review the reports on the SBIR programs submitted by the agencies.

New subsection (f)(2) specifies that the Director of the Office of Science and Technology Policy shall report not less than annually, and at such other times as he deems appropriate, to the Committees on Small Business of the Senate and House of Representatives on all phases of the implementation and operation of SBIR programs within the agencies required to establish such programs, together with any recomendations he deems appropriate.

Section 4 of the bill amends Section 3 of the Small Business Act by adding and defining at the end thereof the following operative terms:

New subsection (j)(1) defines Federal agency in a way that differs from that used for other SBA programs. The Committee felt that a separate definition was necessary to insure that the broadest application of "agency" within 5 of the United States Code would be used.

New subsection (j)(3) defines the Small Business Innovation Research program. Language describing the first phase has been changed from requiring Phase I proposals to be evaluated according to "technical and economic feasibility" to requiring that they be judged regarding "scientific and technical merit and feasibility." Based on the testimony received at the hearings, the Committee felt that the review procedures should take into account the scientific merit and feasibility

nical and economic feasibility" to requiring that they be judged regarding "scientific and technical merit and feasibility." Based on the testimony received at the hearings, the Committee felt that the review procedures should take into account the scientific merit and feasibility

as well as the technical feasibility. Further, since the commercial potential of proposals of approximately equal merit and feasibility is assessed at the second phase, considerations of "economic feasibility" for Phase I proposals is less important, although determining commercial feasibility of projects is one of the primary objectives of the program.

The definition of the third phase was changed to clarify the Committee's intent that the funding of this phase be discretionary and that funding was to be pursued solely with non-Federal funds. The Committee also wanted to clarify its intent that follow-on production contracts may be competitively procured, and added language to this effect.

New subsection (j)(4) defines "research" and "research and development" as it is defined in the Office of Management and Budget Circular A–11, section 44. This is the definition agencies currently use in reporting to OMB.

CHANGES IN EXISTING LAW

In compliance with Rule XXVI(12) of the Standing Rules of the Senate, changes in existing law made by the statutory provisions transmitted herein, are shown as follows (existing law proposed to be omitted is stricken-through, new material is printed in italic, exsting law in which no change is proposed is shown in roman) :

SMALL BUSINESS ACT

* * * * * * * *

SEC. 9. * * *

* * * * * * * *

[(b) It shall be the duty of the Administration, and it is hereby empowered—

(1) to assist small business concerns to obtain Government contracts for research and development;

(2) to assist small business concerns to obtain the benefits of research and development performed under Government contracts or at Government expense; and

(3) to provide technical assistance to small business concerns to accomplish the purposes of this section.]

*(b) It shall be the duty of the Administration, and it is hereby empowered—*

*(1) to assist small business concerns to obtain Government contracts for research and development;*

*(2) to assist small business concerns to obtain the benefits of research and development performed by Government contracts or at Government expense;*

*(3) to provide technical assistance to small business concerns to accomplish the purposes of this section;*

*(4) to develop and maintain an information program and source file, including utilizing a procurement automated source system, to provide small business concerns with information about, and the opportunity to participate in Small Business Innovation Research programs and to share the information with Government agencies participating in the Small Business Innovation Research programs;*

*system, to provide small business concerns with information about, and the opportunity to participate in Small Business Innovation Research programs and to share the information with Government agencies participating in the Small Business Innovation Research programs;*

*(5) to coordinate with agencies required to establish an SBIR program on the release of their SBIR solicitations, and to compile and make publicly available a release schedule of all forthcoming agency SBIR solicitations so as to maximize small business opportunities to respond to such solicitations; and*

*(6) to independently review agencies' annual reports on SBIR program implementation and report not less than annually to the Committees on Small Business of the Senate and the House of Representatives on its review of agencies' reports and actions taken to implement the provisions of the Small Business Innovation Research Act of 1981, together with such recommendations as the Administration may deem appropriate.*

*(c)(1) Each Federal agency which had total obligations for research or research and development in excess of $100,000,000 in fiscal year 1980 or any fiscal year thereafter based upon the most recent actual Federal obligations for total research and development as determined by the National Science Foundation's Federal Funds for Research and Development Series shall—*

*(A) unilaterally establish goals specifically for funding agreements in excess of $10,000 for research or research and development with small business concerns for the next fiscal year. The goals established for each fiscal year shall not be less than the percentage of the agency's research or research and development budget expended under funding agreements with small business concerns in the immediately preceding fiscal year. Obligations incurred pursuant to an SBIR program as provided for in subparagraph (B) shall not be counted as meeting any portion of the goals established pursuant to this subparagraph;*

*(B) establish a SBIR program, subject to the provisions of subsection (d), if 1 per centum of the amount available for obligation by the agency for research or research and development for the fiscal year in question equals or exceeds $3,000,000 after application of the formual contained in paragraph (2); and*

*(C) report annually to the Director of the Office of Science and Technology Policy and to the Administration on actions taken to implement the provisions of subparagraphs (A) and (B), the individual number of research and research and development grants, contracts, and cooperative agreements in excess of $10,000, the total dollar value of all such awards, and an identification of SBIR awards and a comparison of the number and total amount of such awards with awards for research or research and development to other than small business concerns.*

*(2) For the purpose of paragraph (1)(B), the amount available for obligation for research or research and development shall be arrived at by multiplying the total amount available for obligation for research or research and development in the year for which the amount to be made available is being determined by a percentage obtained by dividing the actual expenditures by the agency for research or research and development with non-profit and for-profit entities outside the Federal Government or conducted in or funded through Government-owned, contractor-operated facilities for the most recent fiscal year for which data are available preceding the year for which the amount to be made*

*Government or conducted in or funded through Government-owned, contractor-operated facilities for the most recent fiscal year for which data are available preceding the year for which the amount to be made*

*available is being determined by the total expenditures for research or research and development for such fiscal year.*

*(d) Each Federal agency required to establish an SBIR program pursuant to subsection (c)(1)(B) shall—*

*(1) make available for such program and for no other purpose—*

*(A) not less than 20 per centum of the amount determined pursuant to subsection (c)(1)(B) in the first fiscal year of its SBIR program;*

*(B) not less than 60 per centum of the amount determined pursuant to subsection (c)(1)(B) in the second fiscal year of its SBIR program; and*

*(C) not less than the amount determined pursuant to subsection (c)(1)(B) in each subsequent fiscal year, except that notwithstanding subparagraphs (A) and (B), any Federal agency which is required to establish an SBIR program pursuant to subsection (c)(2) and which had total obligations for research or research and development of $2,000,000,000 or less in the preceding fiscal year shall make available for such SBIR program and for no other purpose the amount determined pursuant to subsection (c)(1)(B) in the first and every subsequent fiscal year of its SBIR program;*

*(2) determine appropriate topics to be included in its SBIR program solicitations;*

*(3) issue and make publicly available its SBIR program solicitations in accordance with a schedule coordinated with the Administration and other agencies required to establish an SBIR program so as to maximize small business opportunities to participate in the Small Business Innovation Research programs;*

*(4) receive and evaluate proposals resulting from SBIR solicitations;*

*(5) select recipients of its SBIR funding agreements;*

*(6) make payments to recipients of SBIR funding agreements on the basis of progress toward, or completion of, funding agreement requirements;*

*(7) after consultation with the Office of Federal Procurement Policy, by rule restablish uniform procedures which fully implement the policy directives issued pursuant to subsection (e) of this section; and*

*(8) not count any funding agreements with small business concerns for research or research and development which result from selections other than pursuant to an SBIR solicitation as meeting any portion of the percentage requirements of paragraph (1) of this subsection.*

*(e) The Administrator of the Office of Federal Procurement Policy, after consultation with the Director of the Office of Science and Technology Policy, the Intergovernmental Affairs Division of the Office of Management and Budget, and the Administration shall, within one hundred and twenty days of the enactment of the Small Business Innovation Research Act of 1981, issue policy directives for the general conduct of the SBIR programs within the Federal Government, including providing for—*

*(1) a uniform agency SBIR solicitation format;*

*(2) receipt and review of proposals;*

*duct of the SBIR programs within the Federal Government, including providing for—*

*(1) a uniform agency SBIR solicitation format;*

*(2) receipt and review of proposals;*

*(3) a funding process which includes—*

*(A) outside peer review as appropriate;*

*(B) protection of small business interests regarding data generated in the performance of funding agreements;*

*(C) transfer of title to property provided by the agency to the small business concern where such transfer would be more cost-efficient than recovery of the property by the agency;*

*(D) cost principles; and*

*(E) payments to recipients of SBIR funding agreements on the basis of progress toward of completion of the funding agreement requirements;*

*(4) a format for establishing goals for funding agreements in excess of $10,000 for research or research and development for small business concerns;*

*(5) a format for agency annual reports on their SBIR programs; and*

*(6) timely submission of agency annual reports to the Director of the Office of Science and Technology Policy and to the Administration.*

*In developing the policy directives, the Administrator of the Office of Federal Procurement Policy shall, to the maximum extent possible, seek conformity with the Federal Grants and Cooperative Agreements Act of 1977, and the formation of a single, simplified, uniform procurement regulation pursuant to the Office of Federal Procurement Policy Act and Public Law 95–507.*

*(f) The Director of the Office of Science and Technology Policy, in consultation with the Federal Coordinating Council for Science, Engineering and Research, shall, in addition to such other responsibilities imposed upon him by the Small Business Innovation Act of 1981—*

*(1) independently survey and monitor all phases of the implementation and operation of SBIR programs within agencies required to establish an SBIR program, including compliance with the expenditure of funds according to the requirements of subsection (d) of this section; and*

*(2) report not less than annually, and at such other times as the Director may deem appropriate, to the Committees on Small Business of the Senate and House of Representatives on all phases of the implementation and operation of SBIR programs within agencies required to establish an SBIR program, together with such recommendations as the Director may deem appropriate.*

[(c)] *(g)* The Administration is authorized to consult and cooperate with all Government agencies and to make studies and recommendations to such agencies, and such agencies are authorized and directed to cooperate with the Administration in order to carry out and to accomplish the purposes of this section.

[(d)] *(h)* (1) The Administrator is authorized to consult with representatives of small-business concerns with a view to assisting and encouraging such firms to undertake joint programs for research and development carried out through such corporate or other mechanism as may be most appropriate for the purpose. Such joint programs may, among other things, include the following purposes:

(A) To construct, acquire, or establish laboratories and other facilities for the conduct of research;

as may be most appropriate for the purpose. Such joint programs may, among other things, include the following purposes:

(A) To construct, acquire, or establish laboratories and other facilities for the conduct of research;

(B) To undertake and utilize applied research;

(C) To collect research information related to a particular industry and disseminate it to participating members;

(D) To conduct applied research on a protected, proprietary, and contractual basis with member or nonmember firms, Government agencies, and others;

(E) To prosecute applications for patents and render patent services for participating members; and

(F) To negotiate and grant licenses under patents held under the joint program, and to establish corporations designed to exploit particular patents obtained by it.

(2) The Administrator may, after consultation with the Attorney General and the Chairman of the Federal Trade Commission, and with the prior written approval of the Attorney General, approve any agreement between small-business firms providing for a joint program of research and development, if the Administrator finds that the joint program proposed will maintain and strengthen the free enterprise system and the economy of the Nation. The Administrator or the Attorney General may at any time withdraw his approval of the agreement and the joint program of research and development covered thereby, if he finds that the agreement or the joint program carried on under it is no longer in the best interests of the competitive free enterprise system and the economy of the Nation. A copy of the statement of any such finding and approval intended to be within the coverage of this subsection, and a copy of any modification or withdrawal of approval, shall be published in the Federal Register. The authority conferred by this subsection on the Administrator shall not be delegated by him.

(3) No act or omission to act pursuant to and within the scope of any joint program for research and development, under an agreement approved by the Administrator under this subsection, shall be construed to be within the prohibitions of the antitrust laws or the Federal Trade Commission Act. Upon publication in the Federal Register of the notice of withdrawal of his approval of the agreement granted under this subsection, either by the Administrator or by the Attorney General, the provisions of this subsection shall not apply to any subsequent act or omission to act by reason of such agreement or approval.

* * * * * * *

SEC. 3. * * *

* * * * * * *

*(i) For purposes of section 9 of this Act—*

*(1) the term "Federal agency" means an executive agency as defined in section 105 of title 5, United States Code, or a military department as defined in section 102 of such title;*

*(2) the term "funding agreement" means any contract, grant, or cooperative agreement entered into between any Federal agency and any small business concern for the performance of experimental, developmental, or research work funded in whole or in part by the Federal Government;*

*(3) the term "Small Business Innovation Research Program" or "SBIR" means a program under which a portion of a Federal agency's research or research and development effort is reserved*

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*agency and any small business concern for the performance of experimental, developmental, or research work funded in whole or in part by the Federal Government;*

*(3) the term "Small Business Innovation Research Program" or "SBIR" means a program under which a portion of a Federal agency's research or research and development effort is reserved*

*for award to small business concerns through a uniform process having—*

*(A) a first phase for determining, insofar as possible, the scientific and technical merit and feasibility of ideas submitted pursuant to SBIR program solicitations;*

*(B) a second phase to further develop the proposed idea to meet the particular program needs, the awarding of which shall take into consideration the scientific and technical merit and feasibility evidenced by the first phase and, where two or more proposals are evaluated as being of approximately equal scientific and technical merit and feasibility, special consideration shall be given to those proposals that have demonstrated third phase, non-Federal capital commitments; and*

*(C) where appropriate, a third phase where non-Federal capital pursues commercial applications of the research or research and development and which may also involve follow-on production contracts with a Federal agency for products or processes intended for use by the United States Government: Provided, That nothing herein shall be deemed to restrict, or otherwise limit competition for such follow-on contracts; and*

*(4) the term "research" or "research and development" means any activity which is (A) a systematic, intensive study directed toward greater knowledge or understanding of the subject studied; (B) a systematic study directed specifically toward applying new knowledge to meet a recognized need; or (C) a systematic application of knowledge toward the production of useful materials, devices, and systems or methods, including design, development and improvement of prototypes and new processes to meet specific requirements.*

## ADDITIONAL VIEWS OF SENATOR JIM SASSER

The Committee bill, S. 881, the Small Business Innovation Research Act of 1981, is a fine piece of legislation and one of which the Committee can be justifiably proud. I cosponsored and voted for this measure as I did similar legislation in the last Congress because of the great stake that the Nation has in technological progress and because of the proven ability of small firms to contribute to our research efforts.

There is one aspect of the research issues raised by the bill that I wish to express some comment about—that is how S. 881 may affect institutions of higher learning in their basic research efforts. Several universities have expressed some concern over the implications that S. 881 has for their basic research efforts.

This legislation should not be construed as an attempt to diminish participation in federally sponsored research by colleges and universities. Their many contributions to science and to medicine and to many other fields are well known and appreciated. These efforts will continue. When the Senate considers S. 881, I trust that my distinguished colleagues, Senator Rudman, Senator Weicker, and Senator Nunn will give this matter their full consideration.

JIM SASSER.

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# PATENT
# OFFICE
# SOCIETY

## Conclusion

These winds do not bode well for those who use fraud, deception, or other unfair acts or practices to prey upon independent inventors. The extent to which these practices are common in the invention promotion business is not known at the present time. However, indications are that they are not uncommon and their level of incidence is unacceptably high. Promoters engaging in such practices appear to be only casually interested in commercialization of their clients' ideas and inventions. Their profit is derived, not from the success of the invention, but from the front end load levied against their clients. A prohibition against charging substantial initial fees would, in effect, deprive such promoters of this major, if not only, source of revenue. It is highly doubtful that these firms have either the technical or commercial competence to alter their covert business practices sufficiently to conform to FTC requirements and, at the same time, earn a reasonable profit. Hence, the current FTC action, reinforced by the FTC Improvements Act, may mark the beginning of the end of the "idea promoter," as it is currently construed.

It is appropriate here to raise two questions:

1. Is the FTC, in light of this possibility, warranted in taking such actions?
2. What alternatives then exist for the independent inventor?

The data made public to date tends to indicate that such action by the FTC is indeed appropriate. In a sense, inactivity on the part of the Commission can hardly be justified. Assuming that the data released to date by the FTC is representative of other such promoters, these promoters do not offer a viable alternative to no service at all. In fact, the inventor would be better off without such service. However, careless application of these remedies could deprive inventors of the services

of legitimate technology transfer agents. While such services are rare, there appears to be an increasing interest in technology transfer and the plight of the independent inventor. General Electric, Control Data, Dvorkovitz, and Gulf Western are among corporations with technology transfer programs that may offer a viable corporate-based alternative to the idea broker. In addition, two Canadian Universities, the Universities of Waterloo and Sherebrook, are in the process of joining the University of Oregon's National Science Foundation-funded Innovation Center in providing evaluation, research, development, and technology transfer assistance to independent inventors.

Protection of the nation's independent inventors is long overdue, but so is their encouragement and assistance. The remedies proposed to date by the FTC seem reasonable and should not unduly restrict the development of legitimate idea brokerage programs. However, the FTC has only removed a thorn from the side of the inventor. The age of the better mouse trap, if it ever existed, is over. The basic problem of the independent inventor is that he or she needs assistance in beating a path to the world's door.

NATIONAL TECHNOLOGY TRANSFER CENTER
Wheeling *Jesuit* College/316 Washington Ave./Wheeling, WV 26003
(304) 243-2455 Fax (304) 243-2463

February 2, 1995

Mr. Norman J. Latker
Managing Attorney
Browdy and Neimark
Intellectual Property Law
419 Seventh Street, NW
Washington, DC 20004

Dear Norm:

I regret you were unable to attend the National Technology Transfer Center's Technology Managers Advisory Board meeting January 25, 1995. Please contact me with any comments you may have on the enclosed meeting handouts. With your input, we continue to make valuable improvements to our products and services.

The next meeting will be held in Wheeling, West Virginia at our new facilities. The exact date of the meeting will be determined according to the completion of the building's construction. You will be notified as soon as possible of the date.

In the interim, please contact Andrea Yates at (304)243-2157 with any questions. Best wishes for a productive and enjoyable spring.

Cordially,

Lee W. Rivers
Executive Director

Enclosures

LWR/aly

# Changes in Congress Affecting the Technology Transfer Community



Prepared by the Wheeling Jesuit College Government Relations Office

Prepared by the Wheeling Jesuit College Government Relations Office

# Changes in Congress Affecting the Technology Transfer Community

A variety of Capitol Hill watchers have analyzed the sweeping changes ushered in by the November election results and issued wide ranging reports that attempt to predict the future for science and technology programs in the federal government. This report represents an attempt to synthesize those reports into a brief review to encourage effective discussion of the future of federal technology transfer. The GOP is now the majority party in both chambers. However, it is in the House of Representatives where the significant changes have occurred in committee structure and direction.

This report seeks to identify committee changes in the 104th Congress primarily in the U.S. House of Representatives, relate predictions for the course of federal technology programs, and inform the reader about areas of concern.

## I. Committee Changes

While changes in membership, direction and responsibilities are evident in virtually every House committee, this report will focus on those committees that affect federal science and technology initiatives, funding, authorization and intellectual property rights.

Reforms in the way the House does its business are expected to substantially weaken House committees and make a new generation of "bosses" unlikely. Power is expected to flow back to the speaker who is on record as desiring to see fewer but better bills passed. New rules have eliminated three committees, slashed committee staff by one-third, imposed term limits on committee and subcommittee chairmen, and ended proxy voting in committee. House rule changes now require three-fifths majority to pass tax increases.

### A. Appropriations

**Committee Chairman** - New full committee chair is Robert L. Livingston of Louisiana. Livingston was elevated over other ranking members of the committee for the chairmanship. Some members were passed over in Speaker Gingrich's appointment process because of a demonstrated lack of zeal in



Robert L. Livingston



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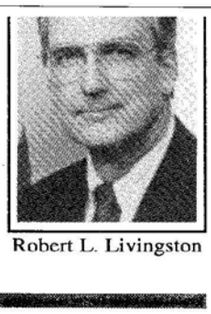

Robert L. Livingston

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**Committee Composition** - The new committee will have 25 Republicans and 21 Democrats compared to the 103rd Congress' 27 Democrats and 17 Republicans.

New Republicans include: Burr of North Carolina, Bilbray of California, Whitfield of Kentucky, Ganske of Iowa, Frisa of New York, Norwood of Georgia, White of Washington and Coburn of Oklahoma.

New Democrats include Gordon of Tennessee, Gurse of Oregon, Deutsch of Florida, Rush of Illinois, Eshoo of California, Klink of Pennsylvania and Stupak of Michigan.

**Subcommittee Chairs** - New Republican subcommittee chairs include:

**Commerce, Trade and Hazardous Materials** - Michael Oxley, Ohio

**Energy and Power** - Dan Schaefer, Colorado

**Health and Environment** - Michael Bilirakis, Florida

**Oversight and Investigation** - Joe Barton, Texas

**Telecommunications and Finance** - Jack Fields, Texas

## C. Government Reform and Oversight

(formerly Government Operations)

**Committee Chairman** - The new chairman is William F. Clinger of Pennsylvania, a nine-term member.


William F. Clinger

**Committee Composition** - The committee will be composed of 27 Republicans, 22 Democrats and 1 independent compared to the 103rd Congress' 25 Democrats, 16 Republicans and 1 independent.

New Republicans include: Gilman of New York, Burton of Indiana, Morrella of Maryland, Blute of Massachusetts, Davis of Virginia, McIntosh of Indiana, Fox of Pennsylvania, Tate of Washington, Chrysler of Michigan, Gutknecht of Minnesota, Souder of Indiana, Martini of New Jersey, Scarborough of Florida, Shadegg of Arizona, Flanagan of Illinois, Bass of New Hampshire, LaTourette of Ohio, Sanford of South Carolina, and Ehrlich of Maryland.

**Subcommittee Chairs** - New Republican subcommittee chairs include:

**Civil Service** - Ileana Ross-Lehtinen, Florida

**District of Columbia** - Thomas M. Davis III, Virginia

**Government Management, Information and Technology** - Steve Horn, California

**Human Resources and Intergovernmental Relations** - Christopher Shays, Connecticut



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Doggett of Texas, Doyle of Pennsylvania, Jackson-Lee of Texas and Luther of Michigan.

**Subcommittee Chairs** - New Republican Subcommittee Chairs include:

**Space and Aeronautics** - Jim Sensenbrenner, Wisconsin

**Basic Research** - Steve Schiff of New Mexico

**Energy and Environment** - Dana Rohrabacher, California

**Technology** - Constance Morella, Maryland

## F. Small Business

**Committee Chair** - The new Chair is Jan Meyers of Kansas

**Committee Composition** - The committee will be composed of 22 Republicans and 19 Democrats compared to the 103rd Congress' 27 Democrats and 18 Republicans.

New Republicans include: Smith of Washington, LoBiondo of New Jersey, Wamp of Tennessee, Kelly of New York, Chrysler of Michigan, Longley of Maine, Jones of North Carolina, Salmon of Arizona, Radanovich of California, Hilleary of Tennessee, Souder of Indiana, Brownback of Kansas and Chabot of Ohio. At the time this report was prepared, there were three additional Republican vacancies.

New Democrats include: Peterson of Florida, Thompson of Mississippi, Fattah of Pennsylvania, Bentsen of Texas, McCarthy of Missouri, Luther of Minnesota and Kennedy of Rhode Island.

**Subcommittee Chairs** - New subcommittee chairs include:

**Procurement, Exports and Business Opportunities** - Donald Manzullo, Illinois

**Regulation and Paperwork** - James Talent of Missouri

**Government Programs** - Peter Torkildsen of Massachusetts

**Tax and Finance** - Linda Smith of Washington

# II. Issues

Most Hill watchers agree that the federal government is on the verge of massive program cutting. Congressional liaison offices contacted by this department have noted that the White House may be preparing to "out Republican the Republicans" as administration researchers fan out to ask questions about specific programs in nearly every agency. It is generally agreed that the overall picture remains cloudy. However, key observers advise using the President's proposed budget and the Republican's "Contract with America" as guides for



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Reduce Arts and Humanities - $531 million

Convert campus based aid - $2.8 billion

Reduce the overhead rate on federally sponsored university research, $1.6 billion

# IV. The Science Committee

Rep. Walker's Science Committee is seen as a major battlefield on R&D efforts. The committee's Energy and Environment Subcommittee will have legislative responsibility over the Department of Energy's civilian research programs, Environmental Protection Agency research programs and marine research oceanography and National Weather Service activities of the National Occanic and Atmospheric Administration.

## A. Jan. 6 Hearings

At a Jan. 6 hearing before the Science Committee, the heads of the administration's science and technology departments sounded alarms over the provisions of the Contract with America that they see as undermining their missions.

Jack Gibbons, director of the White House Office of Science and Technology Policy (OSTP) told the committee that early interpretations of proposals to fund the contract will hinder abilities to develop and disseminate the education technologies that will be needed to compete in the global knowledge-based economy. He added that there are concerns that investment in research to ensure the nation's preeminence in industries that depend upon biotechnology or information and communications technologies could be jeopardized.

Rep. Walker is opposed to programs like the Advanced Technology Program (ATP). He has termed ATP as poor industrial policy. Commerce Secretary Ron Brown said ATP has nothing to do with industrial policy and has more to do with keeping the nation on the cutting edge as far as technological innovation. He said it is important to support industry-led technology partnerships to address a market gap in R&D that will make the U.S. less competitive in 20 years.

"We have learned over the years, that all too often, U.S. discoveries of basic knowledge were better exploited by other countries who are better able to develop applicable technologies and then transform them into competitive products and services," Brown said. "...Our industry-led technology development partnerships are an important link between basic science and private sector commercialization. We should continue to expand these efforts not abandon them."

EPA Administrator Carol Browner expressed concern over the risk assessment provisions of the Job Creation and Wage Enhancement Act - a direct product of the Contract with America. Browner said the bill would "freeze science in time." Browner said judicial review provisions would clog the courts with

**"...all too often, U.S. discoveries of basic knowledge were better exploited by other countries who are better able to develop applicable technologies and then transform them into competitive products and services." - Ron Brown**



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# Key Dates on the Congressional Calendar

The Republican leadership has announced the following schedule for the beginning of the first session of the 104th Congress:

| | |
|---|---|
| January 16 | Martin Luther King Jr. recess |
| February 17-21 | President's Day recess |
| March 20-24 | Senate recess |
| April 14-21 | Senate Easter recess |
| April 14 - May 8 | House Easter Recess |



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U.S. GOVERNMENT
SMALL BUSINESS ADMINISTRATION
WASHINGTON, D.C. 20416

January 11, 1979

ESTABLISH THE OFFICE OF SMALL BUSINESS PATENT COUNSEL

Areas of technology in need of increased industrial innovation would be selected as areas in which the Office of Small Business Patent Counsel would advise and assist small businesses.

The office staff would be supplemented by the use of private sector Patent Attorneys, Economists, management and marketing personnel, etc.

Advice on the licensing and/or marketing of patented products would be made available at no charge to emerging businesses or existing small businesses interested in developing and marketing new products in the areas of technology in need of increased industrial innovation.

The Office of Small Business Patent Counsel would not be involved in the preparation and/or filing of patent applications~~, nor in representing small businesses in litigation.~~