

**U. S. DEPARTMENT OF COMMERCE
UNITED STATES PATENT AND TRADEMARK OFFICE
REGISTRATION EXAMINATION
FOR PATENT ATTORNEYS AND AGENTS**

AUGUST 26, 1998

Morning Section (100 Points)

Time: 3 Hours

DIRECTIONS

This section of the examination is an open book examination. You may use books, notes, or other written materials that you believe will be of help to you *except* you may not use prior registration examination questions and/or answers. Books, notes or other written materials containing prior registration examination questions and/or answers *cannot* be brought into or used in the room where this examination is being administered. If you have such materials, you must give them to the test administrator before this section of the examination begins.

All questions must be answered in SECTION 1 of the Answer Sheet which is provided to you by the test administrator. You must use a No. 2 (or softer) lead pencil to record your answers on the Answer Sheet. Darken *completely* the circle corresponding to your answer. You must keep your mark within the circle. Erase *completely* all marks except your answer. Stray marks may be counted as answers. No points will be awarded for incorrect answers or unanswered questions. Questions answered by darkening more than one circle will be considered as being incorrectly answered.

This section of the examination consists of fifty (50) multiple choice questions, each worth two (2) points. Do not assume any additional facts not presented in the questions. When answering each question, unless otherwise stated, assume that you are a registered patent practitioner. Any reference to a practitioner is a reference to a registered patent practitioner. The most correct answer is the policy, practice, and procedure which must, shall, or should be followed in accordance with the U.S. patent statutes, the PTO rules of practice and procedure, the Manual of Patent Examining Procedure (MPEP), and the Patent Cooperation Treaty (PCT) articles and rules, unless modified by a subsequent court decision or a notice in the *Official Gazette*. There is only one most correct answer for each question. Where choices (A) through (D) are correct and choice (E) is "All of the above," the last choice (E) will be the most correct answer and the only answer which will be accepted. Where two or more choices are correct, the most correct answer is the answer which refers to each and every one of the correct choices. Where a question includes a statement with one or more blanks or ends with a colon, select the answer from the choices given to complete the statement which would make the statement *true*. Unless otherwise explicitly stated, all references to patents or applications are to be understood as being U.S. patents or regular (non-provisional) utility applications for utility inventions only, as opposed to plant or design applications for plant and design inventions. Where the terms "USPTO," "PTO," or "Office" are used in this examination, they mean the U.S. Patent and Trademark Office.

You may write anywhere on this examination booklet. However, do not remove any pages from the booklet. Only answers recorded in SECTION 1 of your Answer Sheet will be graded. YOU MUST SCORE AT LEAST 70 POINTS TO PASS THIS SECTION OF THE REGISTRATION EXAMINATION.

DO NOT TURN THIS PAGE UNTIL YOU ARE INSTRUCTED TO

1. As patent counsel for the National Pharmaceutical Company (NPC), you prepared and filed in the PTO a patent application for an improved medication for treating osteomyelitis, an infectious inflammatory bone disease. The application listed John Jones, an NPC research biochemist who is obligated by an employment contract to assign all inventions to NPC, as the sole inventor. The specification referenced a prior art medication containing an effective amount of an organic compound having a cyclopentadiene ring structure containing a metal ion held by coordination bonds used in the treatment of osteomyelitis, and noted that its use was often accompanied by nausea and muscle cramps. Comparative test data set forth in the specification revealed that the negative side effects of the use of the prior art medication could be essentially avoided by limiting the metal ion to a metal ion selected from the group consisting of osmium (atomic number 76), iridium (atomic number 77), platinum (atomic number 78), and gold (atomic number 79). Following several years of prosecution, the application issued as a patent on February 24, 1998, with the following single claim:

A medication for treating osteomyelitis containing an effective amount of an organic compound having a cyclopentadiene ring structure containing a metal ion held by coordination bonds, said metal ion being selected from the group consisting of osmium, iridium, platinum, and gold.

On February 10, 1998, Jones submitted an invention disclosure to you containing test data demonstrating that when iridium, platinum, or gold, as contrasted with osmium, is selected for the metal ion of the aforementioned organic compound, half as much organic compound is required to be effective in the medication for treating osteomyelitis. You then prepared and filed on February 23, 1998, a continuation-in-part application in the PTO on this discovery. In the first Office Action the primary examiner rejected the following claim on the ground of "statutory type" double patenting over the Jones patent based on 35 U.S.C. § 101:

A medication for treating osteomyelitis containing an effective amount of an organic compound having a cyclopentadiene ring structure containing a metal ion held by coordination bonds, said metal ion being selected from the group consisting of iridium, platinum, and gold.

Which of the following actions should overcome the examiner's rejection in accordance with proper PTO practice and procedure?

- (A) File a reply traversing the rejection and arguing that the same invention is not being claimed because the patent claim is broader than the rejected claim. Therefore, the patent claim can be infringed without infringing the rejected claim.
- (B) File an amendment rewriting the claim in accordance with 37 CFR § 1.121, and adding the corresponding atomic number immediately following the recitation of each metal ion.
- (C) File a terminal disclaimer under 37 CFR § 1.321.
- (D) File a declaration of prior invention under 37 CFR § 1.131.

- (E) File a reply traversing the rejection and arguing that 35 U.S.C. § 103(c), does not preclude patentability because “the subject matter and the claimed invention, were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.”

2. Your client, Mr. Jones, asked you to prepare a patent application for his new pasta maker. The key features of the invention are the different types of dough which can be used and the shapes of the pasta which can be made. The completed application was filed on Monday, May 18, 1998. After filing the application, you conducted a prior art search and found a published article by another which was published on May 16, 1997. The published article discusses a pasta maker very similar to your client’s pasta maker. In the course of your search, you also found a few patents, but none as pertinent as the article. You file all of the prior art in an Information Disclosure Statement on June 8, 1998. In your opinion, the article is the best available prior art. Assuming that this is true, under which of the following sections of Title 35 U.S.C., if any, would Mr. Jones not be entitled to a U.S. patent?

- (A) 102(a)
- (B) 102(b)
- (C) 102(d)
- (D) 102(e)
- (E) None of the above.

3. In which of the following situations, if any, can you assist John in obtaining a patent under the Plant Patent Act?

- (A) While weeding his garden, John noticed a number of unusual plants growing in his vegetable garden. In autumn, John dug up the strange plants and discovered tubers which appeared to be a distinct and new variety of Jerusalem artichoke. The next spring, John planted the tubers and succeeded in starting a new crop.
- (B) While touring the rain forest in South America, John discovered a distinct and new variety of orchid growing in an uncultivated state on the banks of the Amazon river.
- (C) While experimenting with a number of different plants in his flower garden, John was able to sexually reproduce a distinct and new variety of a plant. Unable to think of a suitable name, he decided to call it “A Rose by Any Other Name.”
- (D) While experimenting with different techniques for extruding plastic, John succeeded in making a new, original and ornamental design for a bouquet utilizing an extrusion technique common in the plastics industry.
- (E) None of the above.

4. As patent counsel for the Apex Biotechnology Corporation, you filed a patent application in the PTO on January 2, 1998, naming Smith as inventor, with claims directed to a method for recovering a purified eucaryotic growth hormone or an analog thereof from a bacterial cell. The growth hormone or analog thereof is produced in the bacterial cell via expression of a DNA sequence encoding the hormone or analog. A primary patent examiner initially rejected all the claims as obvious under 35 U.S.C. §§ 102(e)/103 in view of a commonly assigned application Serial No. 0X/XXX,XXX (the 'XXX application), filed December 29, 1995 naming Jones as inventor. The rejection was "provisional" in the sense that the 'XXX application had not yet issued as a patent. After consultations with Smith and Apex management, you filed a terminal disclaimer complying with 37 CFR § 1.321(c) disclaiming that part of the term of the Smith application which would extend beyond the expiration date of the commonly assigned, copending 'XXX application. Upon the 'XXX application becoming abandoned, in favor of a Continued Prosecution Application (CPA), filed June 4, 1998, the examiner withdrew the rejection and substituted the following two rejections in the Smith application:

(1) A rejection of all the claims under 35 U.S.C. §§ 102(e)/103 as obvious over commonly-assigned U.S. Patent No. A,AAA,AAA to Able in view of U.S. Patent No. B,BBB,BBB to Baker; and

(2) A "provisional" rejection of all the claims under 35 U.S.C. §§ 102(e)/103 as obvious over of the CPA application in view U.S. Patent No. B,BBB,BBB to Baker.

The examiner correctly noted that both the Able patent and the CPA application disclose, but do not claim, the subject matter of the abandoned 'XXX application, and that the application which matured into the Able patent was assigned to Apex and was filed in the PTO on December 29, 1995. The invention claimed in the Smith application is patentably distinct from the inventions claimed in the Able patent and the CPA application.

Which of the following actions and/or arguments is most likely to overcome the examiner's rejections?

- (A) File a reply arguing (1) that the terminal disclaimer should be effective to overcome the 35 U.S.C. §§ 102(e)/103 rejection based on the public policy implicit in 35 U.S.C. § 103(c), which precludes citation as prior art of commonly-owned subject matter developed by another person, and (2) that Smith, Able, and Jones are "other persons."
- (B) File a declaration under 37 CFR § 1.132 by Smith unequivocally declaring that he conceived or invented the subject matter disclosed but not claimed in the references.
- (C) File a reply arguing that the terminal disclaimer should be effective to overcome the 35 U.S.C. §§ 102(e)/103 rejection based on the

analogy of such rejection to a double patenting situation, citing *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed.Cir. 1985), wherein the court characterized an obviousness-type double patenting rejection as “analogous” to a 35 U.S.C. § 103 rejection.

- (D) File an affidavit under 37 CFR § 1.131 by Smith including facts that Smith conceived the claimed invention in a NAFTA member country in August 1993, that Smith moved to Hawaii in 1994 and began working on his conception in earnest during the period December 1994 until December 1, 1995, when he moved to a WTO member country other than a NAFTA country, where he successfully reduced his invention to practice on December 28, 1995. Accompany the affidavit with the argument that the affidavit effectively “swears back” of such references.
- (E) File a declaration under 37 CFR § 1.130 to disqualify the commonly owned references, accompanied by the argument that a prior art reference that renders claimed subject matter obvious under 35 U.S.C. § 103 necessarily creates an obviousness-type double patenting situation, which is obviated by the filing of the terminal disclaimer.

5. Reginald, a registered patent agent, filed a nonprovisional patent application in the PTO on December 4, 1997, naming Able, Baker, and Charlie as joint inventors. The application properly identified all the inventors, a specification and one independent claim and four dependent claims. No drawings, declaration, or filing fees were filed with the application. Subsequently, the PTO correctly informed Reginald that drawings, specifically three figures, were necessary for the understanding of the subject matter sought to be patented. At the same time, the PTO informed Reginald that the declaration and filing fee were missing. On February 13, 1998, Reginald filed in the PTO drawings of the three figures. On February 17, 1998, the Official Draftsman required new drawings on the ground that the submitted drawings were not in compliance with the standards of 37 CFR § 1.84, although he regarded them as suitable for reproduction and admitted them for examination purposes. On February 19, 1998, Reginald filed in the PTO a declaration signed by all the inventors. On February 20, 1998, Reginald filed in the PTO a written authorization to charge the filing fee of the application and all surcharges to his established deposit account which contained sufficient funds. On March 6, 1998, Reginald filed in the PTO a set of new drawings in compliance with the standards of 37 CFR § 1.84. In accordance with proper PTO practice and procedure, what filing date should the PTO assign to Reginald’s patent application?

- (A) December 4, 1997
- (B) February 13, 1998
- (C) February 19, 1998
- (D) February 20, 1998
- (E) March 6, 1998

6. Johnson invented an improved hose clamp for use on automobile radiator hoses and retained the services of a registered patent agent to obtain patent protection for his invention. The agent prepared the application and filed it in the PTO on June 20, 1994. On October 23, 1996, the patent agent filed a continuation application claiming the benefit of priority under 35 U.S.C. § 120, and thereafter permitted the parent application to become abandoned. During prosecution of the continuation application, the primary examiner rejected all the claims under 35 U.S.C. § 103 as unpatentable over Johnson's issued patents, specifically, Johnson '012 in view of Johnson '004. The Johnson '012 patent issued on November 12, 1991, on an application filed on April 18, 1990. The Johnson '004 patent issued on January 10, 1995, on an application filed on December 3, 1992. Following the filing of a reply traversing the examiner's rejection of the claims, the examiner issued a final rejection. Johnson has now learned that his patent agent has suffered a stroke and is unable to continue representing him, and asks you for your opinion as to whether there is a reasonable chance of overcoming the examiner's rejection.

Based on the following opinions, which do you believe is the best answer and most consistent with PTO practice and procedure?

- (A) There is little likelihood of overcoming the primary examiner's rejection because both references issued more than a year prior to the filing date of the continuation application. This is supported by 35 U.S.C. § 102, which states, "A person shall be entitled to a patent unless - . . . (b) the invention was patented . . . in this . . . country . . . more than one year prior to the date of the application for patent in the United States"
- (B) There is little likelihood of overcoming the primary examiner's rejection because the primary reference, i.e., Johnson '012 patent, issued more than a year prior to the filing date of the parent application, and the secondary reference, i.e., Johnson '004, was filed more than a year prior to the filing date of the parent application. This is supported by 35 U.S.C. § 102, which states, "A person shall be entitled to a patent unless - . . . (b) the invention was patented . . . in this . . . country . . . more than one year prior to the date of the application for patent in the United States . . . or . . . (e) the invention was described in a patent granted on an application for patent . . . filed in the United States before the invention thereof by the applicant for patent"
- (C) There is a reasonable chance of overcoming the primary examiner's rejection because the secondary reference, i.e., Johnson '004 patent, is Johnson's own patent and does not qualify as prior art under 35 U.S.C. §§ 102(a) or (e). Also, since the Johnson '004 patent issued after the filing date of the parent application, and since the continuation application is simply a continuation of the parent application, the Johnson '004 patent does not constitute prior art under 35 U.S.C. § 102(b). Accordingly, the Johnson '004 patent does not qualify as prior art to support a rejection under 35 U.S.C. § 103.
- (D) There is a reasonable chance of overcoming the primary examiner's rejection

because the secondary reference, i.e., Johnson '004 patent, was first patented prior to the filing date of the continuation application for patent in the United States on an application for patent filed more than twelve months before the filing date of the continuation application for patent in the United States. This is supported by 35 U.S.C. § 102, which states, "A person shall be entitled to a patent unless - . . . (d) the invention was first patented . . . by the applicant . . . in a foreign country prior to the date of the application for patent in this country on an application for patent . . . filed more than twelve months before the filing of the application in the United States"

- (E) There is a reasonable chance of overcoming the primary examiner's rejection because both references issued more than a year prior to the filing date of the continuation application, and therefore the invention was made in the United States by Johnson, who had not abandoned, suppressed, or concealed it, before his continuation application. This is supported by 35 U.S.C. § 102, which states, "A person shall be entitled to a patent unless - . . . (g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it," and 35 U.S.C. § 103(c), which states, "Subject matter . . . which qualifies as prior art only under subsection . . . (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person"

7. Which of the following statements regarding a Continued Prosecution Application (CPA) is not correct?

- (A) The request for a CPA can be filed by facsimile and processed entirely in the examining group.
- (B) The CPA will use the same file jacket as the prior application.
- (C) The application number of the CPA remains the same as the prior application.
- (D) No continuation-in-part CPA is permitted.
- (E) Priority to the parent application is granted only if there is reference to the parent application in the first paragraph of the specification of the CPA.

8. Trade Winds, Ltd., is a British company which processes and packages bulk herbs and spices. It sells these goods to distributors, who resell them under a variety of brand names. In February of 1997, Smith, an employee of Trade Winds, conceived the idea, new at that time, of using a container made of clear plastic rather than the traditional tin spice package or an opaque plastic container. In due course, Smith came forward with a large, clear container in the basic shape of a tall box with an oval depression in each side that serves as a hand grip. The container also has a plastic screw-on lid which has a flip-up opening for spooning or shaking out the contents of the container. On March 11, 1997, Trade Winds filed a utility patent application in Great Britain which fully disclosed their new spice container and its unique design, and shortly thereafter, on April 10, 1997, the new container was displayed at a packaging trade show in Yorkshire, England. The container was such a success at the trade show that Trade Winds, on May 6, 1997, entered into a 3 month contract with Professor Yak, a renowned business consultant and Dean of the School of Economics at a university in the United States, to develop a long-range business plan for Trade Winds. In order to get feedback from people who might actually use the container, Professor Yak set up a study at his university in which he selected ten students who were dietetics majors at his university, and tasked them to test the functional features of the new container, the prior art tin container, and the prior art opaque plastic container. The study occurred between June 1, and August 1, 1997. A study guide outlined the methodology, wherein: (1) the students were to pick up the containers and describe how they felt (e.g., comfortable, awkward, easy to grip, balanced, etc.); (2) the students were asked which container they liked best, and why; and (3) the students were asked how the containers felt when shaking out their contents. On March 6, 1998, Trade Winds filed an application for a design patent on the new container in the United States claiming the benefit of the earlier filing date of the British patent application under 35 U.S.C. § 119. Which of the following statements accords with proper PTO practice and procedure?

- (A) The U.S. design patent application is entitled to the benefit of the filing date of the copending British application under 35 U.S.C. § 119. Since this date is earlier than the date of the trade show, the display of the container at the show is not a public use bar under 35 U.S.C. § 102(b).
- (B) The U.S. design patent application is not entitled to the benefit of the filing date of the copending British application under 35 U.S.C. § 119. Therefore, the display of the container at the show is a public use bar under 35 U.S.C. § 102(b).
- (C) The U.S. design patent application is not entitled to the benefit of the filing date of the copending British application under 35 U.S.C. § 119. Therefore, Professor Yak's study activity in the United States constitutes a public use bar under 35 U.S.C. § 102(b).
- (D) The U.S. design patent application is not entitled to the benefit of the filing date of the copending British application under 35 U.S.C. § 119. The U.S. design patent application is barred by Professor Yak's study activity in the United States because the study activity involved the display of the cannister design to a group of students who were not subject to a confidentiality agreement, the activity occurred "in this country," and the activity occurred "more than one year prior to the date of

the application for patent in the United States.”

- (E) The U.S. design patent application is not entitled to the benefit of the filing date of the copending British application under 35 U.S.C. § 119. The U.S. design patent application is not barred by Professor Yak’s study activity in the United States because it occurred less than one year before the application was filed.

9. Able, a researcher with the Royal Fruit Co. (hereinafter “Royal”), discovered a distinct and new variety of peach tree which he successfully succeeded in asexually reproducing. Royal then obtained an assignment from Able, and filed a plant patent application with the PTO claiming the asexually reproduced peach tree. Subsequently, Baker, a researcher with the Georgia Peach Co. (hereinafter “Georgia”), unaware of Able’s discovery, discovered a similar though independent and patentably distinct variety of peach tree. Baker succeeded in asexually reproducing his discovery. Georgia then obtained an assignment from Baker and filed a utility patent application with the PTO claiming the fruit and propagating material of the Baker peach tree. Subsequently, Georgia merged with Royal, which acquired title to all of Georgia’s assets, including the Baker utility patent application. In the course of prosecution of the Baker patent application, the primary examiner “provisionally” rejected all of the claims in the Baker application on the ground of obviousness-type double patenting with the claims in Able’s application. On the basis of the present factual scenario and proper PTO practice and procedure, which of the following statements is true?

- (A) The rejection is improper because while there is a common relationship of ownership, a common relationship of inventorship is lacking.
- (B) The rejection is improper because the Able and Baker inventions are independent and patentably distinct from each other.
- (C) The rejection is improper because there was no common relationship of ownership at the time of Baker’s invention.
- (D) The rejection is proper because the issue of double patenting can be addressed without violating the confidential status of the applications as required by 35 U.S.C. § 122.
- (E) The rejection is improper because a provisional double patenting rejection cannot be based on copending utility and plant patent applications.

10. Sam Smart, a cabinet maker employed by Star Furniture Company, designed a unique armoire blending the ascetic style of Shakerism with the flamboyant style of Victorianism. Star officials were so impressed that they asked Patent Counsel to take immediate steps to obtain patent protection on the armoire. Patent Counsel filed a provisional utility application in the PTO on September 16, 1997, naming Sam Smart as the sole inventor. On March 20, 1998, Patent Counsel filed nonprovisional utility and design applications in the PTO, each application claiming priority from the provisional utility application under 35 U.S.C. § 119(e)(1). In the first Office action in the design application, the examiner rejected the sole claim as unpatentable under 35 U.S.C. § 103 over a photograph of a gun cabinet appearing in a department store catalog published in October 1997. Which of the following actions accords with proper practice and procedure and is most likely to overcome the rejection?

- (A) Traverse the rejection on the ground that the photograph is not available as a reference because the inventors named in the provisional and nonprovisional applications are the same, the nonprovisional application was filed within 12 months of the provisional application, the nonprovisional application refers to the copending provisional application, and the provisional application antedates the publication date of the reference catalog.
- (B) Traverse the rejection on the ground that the photograph is not available as a reference because while the photograph depicts a gun cabinet of substantially the same appearance as the claimed design, the gun cabinet and the armoire are not from analogous arts.
- (C) Traverse the rejection on the ground that the design of the armoire is not obvious from the reference because an armoire functions essentially to hold clothes, whereas a gun cabinet functions essentially to hold rifles.
- (D) Traverse the rejection on the ground that the ornamentation of the armoire is not obvious from the reference since the ornamentation of the armoire is embossed on the armoire surface, whereas the ornamentation of the gun cabinet is impressed in the gun cabinet surface.
- (E) Traverse the rejection by submitting evidence of commercial success of the claimed design and arguing that the overall appearance and design, characteristics of the gun cabinet are basically different from the claimed design.

11. Jack developed a unique safety valve for use in combination with a standard boiler. The safety valve comprises a piezoelectric element which functions to adjust the opening of the valve in response to pressure build-up. His patent agent prepared and filed a proper patent application in the PTO with the following sole original claim:

The combination of a standard boiler with a safety valve, said safety valve comprising a piezoelectric element which functions to adjust the opening of the valve in reply to pressure build-up.

In the first Office action, the primary examiner properly rejected the claim over a combination of references as being unpatentable under 35 U.S.C. § 103. Thereafter, the patent agent responded by filing an amendment which substituted a new claim for the sole original claim. The new claim is also drawn to the combination of a standard boiler with a safety valve. The examiner finally rejected the new claim on same grounds as the original claim was rejected, and stating that the new claim was a substantial duplicate of all the essential features of the canceled claim. Which of the following accords with PTO practice and procedure for responding to the rejection?

- (A) File a response having an amendment which adds a single claim limited to the safety valve, accompanied by argument clearly demonstrating that the claim to the safety valve has limitations not shown in the prior art references.
- (B) File a response clearly and correctly pointing out that the new claim has limitations to particular structure not disclosed or suggested by the prior art references whether considered individually or in combination.
- (C) File a response accompanied by an affidavit under 37 CFR § 1.132 setting forth test data demonstrating the technical superiority of Jack's safety valve over the safety valves in the prior art when used in conjunction pneumatic tire inflation devices.
- (D) File a petition to the Commissioner under 37 CFR § 1.81 and the proper petition fee requesting that the examiner be directed to withdraw the finality of the rejection as being premature because the new claim presented limitations not disclosed or suggested by the prior art references, and the examiner did not address those limitations in the rejection.
- (E) File a petition to the Commission under 37 CFR § 1.183 and the proper petition fee requesting that the examiner be directed to withdraw the finality of the rejection on the ground that the finality of the rejection was premature inasmuch as the new claim contained limitations not disclosed or suggested by the references, and the examiner did not address those limitations in the rejection.

12. When an application filed under 37 CFR § 1.47(a) has been accepted at the PTO, is in pending or abandoned status, and has not been referred to by application number and date in a United States or foreign patent or published application, which of the following may not, as a matter of right, receive information regarding the status of whether the application is pending or abandoned?

- (A) The applicant(s).
- (B) The assignee of record in the Patent and Trademark Office.
- (C) The attorney or agent of record in the application.
- (D) A non-signing inventor.
- (E) None of the above.

13. Jenkins is principal attorney of record in a patent application assigned to the Titan Pharmaceutical Co. in Sacramento, California. The application is directed to one of Titan's most important discoveries, i.e., an improved method of synthesizing quinoline consisting of the steps (a), (b), (c), and (d). After receiving a first Office action objecting to all the claims because of improper form, Jenkins filed an associate power of attorney in the PTO on January 21, 1998, naming Harris as an associate with full power. On February 10, 1998, Harris filed an amendment canceling all the claims and adding new claims 11 and 12, accompanied by appropriate argument. The new claims related to the synthesis of quinoline and consisted of the steps, (a), (b), and (c). On April 6, 1998, the examiner considered the Harris amendment in light of the argument and rejected the two claims as clearly anticipated under 35 U.S.C. § 102 as unpatentable over a 1953 publication by Skraup. Harris forwarded the Office action rejecting the claims along with a copy of the Skraup publication to Jenkins for his review. Jenkins determined that Harris had inadvertently omitted (d), the fourth step of the process. This step was neither disclosed by nor obvious in light of Skraup's teaching. Assuming Jenkins is correct in his determination, which of the following is the best action designed to (1) accord with proper PTO practice and procedure, (2) to overcome the rejection, and (3) be conducive to expeditious prosecution?

- (A) Jenkins should file an amendment adding step (d) to Claims 11 and 12, and offering appropriate argument.
- (B) Jenkins should file an amendment adding Claim 13, which depends from Claim 12. Claim 13 is directed to only step (d), and is accompanied by appropriate argument for patentability.
- (C) The assignee should file a revocation of Jenkins' power of attorney, and concurrently, Harris should file an amendment adding step (d) to the claims and offering appropriate argument.
- (D) The assignee should file a revocation of Jenkins' power of attorney, and after acceptance of the revocation by the PTO, Harris should file an amendment adding step (d) to the claims and offering appropriate argument.
- (E) Harris should file an amendment adding Claim 13, which would depend from Claim 11. Claim 13 would be directed to only step (d). Harris would offer appropriate argument for patentability.

14. You are the only attorney of record in a patent application that you have filed for your client, Jones. The primary examiner set a three month shortened statutory period for reply which requires that an amendment/reply be filed on September 8, 1998. You are away on vacation and will not be back until the end of September. You were planning on filing the reply when you returned. However, while you were away, the client calls your office and informs your secretary that he does not want to pay the additional fees required for an extension of time and wants the reply filed on or before September 8, 1998. Your secretary relays this information to you today, August 26, 1998. Since you were not planning to file the reply until you returned, you do not have Jones' file with you. With Jones' consent, you previously disclosed his invention to your brother, Mike, who is also your partner and a registered practitioner. You call Mike, and ask him

prepare and file a reply. Mike is familiar with the application, and calls Jones to tell him that he will prepare, and file the amendment before the expiration of the three month period to avoid the payment of an extension fee. Can Mike properly prepare and file the reply at the PTO without a power of attorney from Jones?

- (A) Yes, because you and Mike are brothers in the same firm.
- (B) No, because you have not authorized Mike to act on your behalf.
- (C) No, because Mike is not listed as one of the attorneys of record.
- (D) Yes, because Mike is a registered practitioner and his signature and registration number on the reply constitutes a representation that he is authorized to represent Jones.
- (E) No, because Mike would be violating the PTO Code of Professional Responsibility.

You have filed a patent application on behalf of your client, Smith, on October 7, 1997. On July 15, 1998, the examiner sent a second Office action containing a final rejection. You mailed a reply to the PTO on July 10, 1998. Yesterday, you received an *Ex parte Quayle* action. Today, August 26, 1998, Smith brought to your attention prior art that he discovered last week. After reviewing the prior art, you determine that the prior art should be submitted to the PTO for consideration by the examiner. What will need to be filed with an Information Disclosure Statement (IDS) in order for the IDS to be considered by the examiner?

- (A) No additional papers are required to be filed with the IDS.
- (B) A petition requesting consideration of the IDS, and the appropriate fee.
- (C) A certificate of mailing; and the appropriate fee.
- (D) A certification that no information contained in the Information Disclosure Statement (IDS) was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in § 1.56(c) more than three months prior to the filing of the statement, and a petition requesting consideration of the IDS and the appropriate fee.
- (E) A certification and statement stating that no item of information contained in the IDS was known to any individual designated in § 1.56(c) more than three months prior to the filing of the statement and petition requesting consideration of the IDS.

16. An application you filed for your client, Sam, received a final rejection dated January 12, 1998. The primary examiner set a three month shortened statutory period for reply. As you have been working closely with Sam, you were ready with an immediate reply and filed it with a certificate of mailing dated February 10, 1998. Unfortunately, the primary examiner was not persuaded by your reply, and mailed you an advisory action dated March 2, 1998. After discussing the matter with your client, you have decided that the best route to go is to the Board of Patent Appeals and Interferences. On March 6, 1998, you prepare a Notice of Appeal, and a certificate of mailing dated March 6, 1998. Inadvertently, the Notice of Appeal was not deposited with the U.S. Postal Service. The Notice of Appeal and Certificate of Mailing are hand carried by your intern and delivered to the mail room in the PTO on March 9, 1998. What would be the very last date on which an appeal brief could be filed if a proper petition and fee for the maximum extension of time is filed with the brief?

- (A) May 9, 1998
- (B) June 12, 1998
- (C) September 9, 1998
- (D) October 6, 1998
- (E) October 9, 1998

17. You have filed an application containing three claims drawn to two properly divisible inventions, Claims 1 and 3, linked by Claim 2. Claim 1 is directed to an injection molding process for a thermoplastic, Claim 2 is directed to a molding process for making a synthetic heat exchanger, and Claim 3 is directed to a synthetic heat exchanger. The primary examiner makes a restriction requirement stating that "Claim 2 links the injection molding process and the heat exchanger" and requires you to elect between the inventions defined by Claims 1 and 3. Which of the following would be the most appropriate reply to the restriction requirement?

- (A) Traverse the requirement, ask for reconsideration and withdrawal of the requirement because Claim 2 links both Claims 1 and 3 together.
- (B) Traverse the requirement, and amend Claim 1 to limit the claim to an injection molding process for making a heat exchanger.
- (C) Elect the invention defined by Claim 1 or Claim 3, and urge that since Claim 2 is a linking claim, it should be examined with the claims of the elected invention.
- (D) Elect the invention defined by Claim 2, and argue that you want the choice of using an injection process for making a heat exchanger so that the restriction would be moot since all the claims would be included.
- (E) File a petition requesting review of the requirement for restriction because the inventions defined by Claims 1 and 3 are not properly divisible where a proper linking claim exists.

1. Which of the following statements regarding design patent applications is not correct?

- (A) The specification may contain a brief description denoting the nature and environmental use of the claimed design.
- (B) The drawings may be color drawings or color photographs if accompanied by a grantable petition.
- (C) The design application may have only a single claim.
- (D) Different embodiments or modifications may be set forth in the specification, but do not need to be shown in the drawings.
- (E) The inventive novelty or unobviousness of a design resides in the shape or configuration, and/or surface ornamentation of the subject matter which is claimed.

2. Which PTO official will decide a petition requesting reopening of prosecution of a patent application after a final decision by the Board of Patent Appeals and Interferences under 37 CFR 1.198, where no court action has been filed?

- (A) The Solicitor.
- (B) The primary examiner to whom the application was originally assigned.
- (C) The Administrative Patent Judge who wrote decision.
- (D) The Group Director for the group where the application originated.
- (E) The Director of the Office of National Application Review.

3. Which of the following statements regarding amending a reissue application is not correct?

- (A) An entire paragraph in the specification other than the claims may be deleted by a statement deleting the paragraph without presentation of the text of the paragraph.
- (B) In a claim, hand entry of an amendment of five words or less is permitted.
- (C) Each amendment submission must set forth the status, on the date of the amendment, of all patent claims and of all added claims.
- (D) When responding to an Office action, each amendment when originally submitted must be accompanied by an explanation of the support in the disclosure of the patent for the amendment.
- (E) A new claim added by amendment must be presented with underlining throughout the claim.

21. You have filed a patent application on behalf of your client, Jane Smith. Since then, Jane has married and legally changed her name to Jane Jones. Which of the following would be the most appropriate procedure to make the corresponding name change in Jane's patent application?

- (A) File a petition with the appropriate fee directed to the Office of the Assistant Commissioner for Patents requesting the name change, and include an affidavit signed with both names setting forth the procedure whereby the change of name was effected.
- (B) File an amendment in the application requesting the examiner to change the applicant's name on the application to Jane Jones.
- (C) Expressly abandon the application, and file a continuation application naming Jane Jones as the inventor.
- (D) File a Certificate of Correction with the appropriate fee while the application is pending requesting that Jane Smith be changed to Jane Jones.
- (E) File a petition in the Application Processing Division of the PTO requesting that Jane Smith be changed to Jane Jones.

22. Prior art references may be combined to show obviousness of the claimed invention under 35 U.S.C. § 103. Which of the following most correctly completes the statement: "In establishing obviousness, _____"

- (A) a suggestion to modify the art must be expressly stated in one of the references used to show obviousness."
- (B) a suggestion to modify the art must be expressly stated in all the references used to show obviousness."
- (C) a suggestion to modify the art may be inherently or implicitly taught in one of the references used to show obviousness."
- (D) a suggestion to modify the art is unnecessary unless the patent applicant presents evidence or argument tending to show unobviousness."
- (E) A suggestion to modify the art can come from recent nonanalogous prior art references."

23. Claimed subject matter has been properly rejected under 35 U.S.C. § 103 over a combination of prior art references which render the claimed subject matter *prima facie* obvious. Which of the following actions by a practitioner in accordance with proper PTO procedure is most likely to be sufficient to overcome the *prima facie* case of obviousness?

- (A) Filing a declaration under 37 CFR § 1.132 containing evidence that the claimed subject matter possesses unexpected results, disclosed in the application, which are not described in the prior art, and arguing that the evidence rebuts the *prima facie* case.
- (B) Filing a reply arguing and giving your opinion that the claimed apparatus provides unexpectedly superior productivity.

- (C) Filing a declaration under 37 CFR § 1.132 presenting evidence of superior properties for iron-containing compositions, disclosed in the application where the broad rejected claim is drawn to a “metal-containing” composition. The prior art reference discloses and describes an aluminum composition which satisfies the broad claim, and the practitioner argues that the evidence rebuts the *prima facie* case of obviousness.
- (D) Filing a declaration under 37 CFR § 1.132 which demonstrates that a “metallic” apparatus of Claim 1 has superior properties to a plastic apparatus having all the structural limitations recited in the claim, and arguing that the evidence, which relies on properties disclosed in the application, rebuts the *prima facie* case of obviousness, where Claim 1 was rejected under 35 U.S.C. § 103 over references disclosing metallic apparatuses, and the references made out a *prima facie* case of obviousness.
- (E) Filing a declaration under 37 CFR § 1.132 demonstrating commercial success of a telephone apparatus having all the structural limitations recited in the rejected claim except that the commercially successful apparatus is plastic and is disclosed in the application, whereas the rejected claim is limited to a “metallic” telephone apparatus, and arguing that the evidence rebuts the *prima facie* case of obviousness, where the claim was rejected under 35 U.S.C. § 103 over references disclosing metallic telephone apparatuses, and the references made out a *prima facie* case of obviousness.

Assuming that each claim given below is from a different application, which of the following claims contain improper multiple dependent claim wording?

- (A) Claim 6. A ceramic camshaft as in either Claim 1 or Claim 2, further comprising
- (B) Claim 4. An intake valve as in any of the preceding claims, in which
- (C) Claim 3. A fuel injector according to Claims 1 or 2, further comprising
- (D) Claim 7. A turbocharger as in one of Claims 3-5, in which
- (E) Claim 10. A rotary engine as in Claims 2 or 4 and 8 or 9, which

25. Claimed subject matter has been rejected under 35 U.S.C. § 103 over a combination of prior art references, which purport to render the claimed subject matter *prima facie* obvious. Which of the following rebuttals properly demonstrates in the given circumstances that the references could not render the claimed subject matter *prima facie* obvious, and thereby overcome the rejection?

- (A) Where the primary reference is a Russian patent certificate, the secondary reference is a U.S. patent, and a registered practitioner argues that *prima facie* obviousness has not been demonstrated because the assumption that the person of ordinary skill in the art would be familiar with all prior art references pertaining to a given art is in conflict with reality.
- (B) Where the claimed subject matter is a method for detecting and measuring minute quantities of nitrogen compounds, the primary reference teaches a method for detecting and measuring minute quantities of sulfur having - in addition to all the limitations of the claimed method - a solvent to collect the sample and stating that the presence of nitrogen in the sample will interfere with measuring sulfur quantities, a secondary reference teaching a method of detecting minute quantities of nitrogen in the atmosphere, and a registered practitioner argues that the references may not be properly combined to formulate a rejection of *prima facie* obviousness because there is nothing to suggest that they be combined since the primary reference seeks to avoid nitrogen.
- (C) Where neither the primary nor secondary reference explicitly states that its teachings may be combined with the teachings of the other reference, a registered practitioner should argue that the references may not be properly combined to formulate a rejection of *prima facie* obviousness absent an express suggestion in one prior art reference to look to another specific reference.
- (D) Where the claimed detergent uses sugar to enhance the compatibility of softeners with other components of the detergent, the primary reference teaches a detergent having all the claimed limitations except for the presence of sugar, and the secondary reference teaches using sugar as a filler or weighting agent in detergents having softeners, a registered practitioner should argue that the claimed detergent cannot be *prima facie* obvious unless one reference teaches using sugar for the same purpose it is used in the claimed detergent.
- (E) Where the claimed food additive uses YXY to sweeten food, the primary reference teaches food additive having all the claimed limitations except for using XY as a preservative, and the secondary reference teaches the equivalence of XY and YXY as preservatives in food, a registered practitioner should argue that to establish a *prima facie* case of obviousness there must be a suggestion from the prior art that the claimed invention will have the same or similar utility as the one newly discovered by applicant.

26. The claimed invention in inventor Jones' application is a digital transmission system which communicates a plurality of separate digital streams over a common channel. It includes a transmitter portion (block encoding arrangements and multiplexer), and receiver portion (a demultiplexer and block decoding arrangements). The receiver portion includes a phase comparator having four inputs and one output and a divider having two inputs and one output. The functions of the phase comparator and divider are adequately disclosed in the specification. However, the specification does not describe how to make and use the phase comparator and divider. The examiner correctly and reasonably asserting that the comparator was not a typical two input phase comparator, and the divider was not a typical one input divider, properly rejected the claims under 35 U.S.C. § 112, first paragraph, for lack of enabling disclosure because the structural details of the phase comparator and divider were not disclosed. Which of the following declarations would be minimally legally sufficient to overcome this rejection in accordance with proper PTO practice and procedure?

- (A) A declaration of a professor stating that "the elements referred to in the application as the divider and the phase comparator were well-known to those of skill in the art as of June 17, 1997," the filing date of the Jones application.
- (B) A declaration of a professor stating that "the elements referred to in the application as the divider and the phase comparator were well-known to those of skill in the art as of June 17, 1997," the filing date of the Jones application, and that these elements were "routinely built."
- (C) A declaration of a professor stating that "the elements referred to in the application as the divider and the phase comparator were well-known to those of skill in the art as of June 17, 1997," the filing date of the Jones application, that these elements were "routinely built," and the professor provides details in the declaration concerning the structure and function of the elements.
- (D) A declaration of a professor stating that "the elements referred to in the application as the divider and the phase comparator were well-known to those of skill in the art as of June 17, 1997," the filing date of the Jones application, that these elements were "routinely built and sold to the public by [two identified corporations] before June 17, 1997, and were used in constructing a digital transmission system at the university."
- (E) A declaration of a professor stating that "the elements referred to in the application as the divider and the phase comparator were well-known to those of skill in the art as of June 17, 1997," the filing date of the Jones application, that these elements were "routinely built and sold to the public by [two identified corporations] before June 17, 1997, and were used in constructing a digital transmission system at the university." The professor was involved with the construction of the digital transmission system.

27. X invented a bending machine. On June 18, 1996, the practitioner filed a first patent application in the PTO for X disclosing and claiming the bending machine. The disclosure, drawings, and claims in the first application complied with all regulations for obtaining a filing date. Claims in the first application were given a final rejection in an Office action dated March 2, 1998, setting a three month shortened statutory period for reply. The claims were rejected under 35 U.S.C. § 103 over two U.S. patents issued before 1995. On August 1, 1998, the practitioner became aware of a foreign patent published on July 1, 1997, which discloses a bending machine invented by Y that is identical to the bending machine described and claimed in the first application. X informed the practitioner on August 2, 1998, that X will need an additional two months to complete tests to demonstrate that X's invention provides unexpected results. The practitioner decides to file a continuation application. Which of the following courses of action preclude the foreign patent from possibly being prior art under 35 U.S.C. § 102(b), and complies with the provisions for filing a continuation application in the PTO?

- (A) On September 2, 1998, file in the PTO a document wherein the practitioner requests a continuation application under 37 CFR § 1.53(d), identify and expressly abandon the first application, identify X as the inventor, retain the same claims as were finally rejected, request utilization of the file jacket of the first application, petition for a three month extension of time, and pay the appropriate extension of time and filing fees.
- (B) On September 2, 1998, file in the PTO a document wherein the practitioner requests a continuation application under 37 CFR § 1.53(d), identify and expressly abandon the first application, identify X as the inventor, retain the same claims as were finally rejected, request utilization of the file jacket of the first application, and pay the appropriate filing fee.
- (C) The foreign patent never could be prior art under 35 U.S.C. § 102(b) against X because the first application was filed more than one year before the publication date of the foreign patent. File in the PTO, on October 5, 1998, a duplicate of the first application together with X's affidavit under 37 CFR § 1.132 showing the results of X's tests, an appropriate filing fee, and a preliminary amendment amending the first sentence of the specification to refer to the first application.
- (D) The foreign patent never could be prior art under 35 U.S.C. § 102(b) against X because the first application was filed more than one year before the publication date of the foreign patent. File in the PTO, on October 5, 1998, a duplicate of the first application, X's affidavit under 37 CFR § 1.132 showing the results of X's tests, a petition for a five month extension of time, and appropriate filing and five month extension of time fees.
- (E) On August 26, 1998, file in the PTO a duplicate of the specification (wherein X is identified as the inventor), claims, and drawings of the first application, a letter requesting that the duplicate be treated as continuation application under 37 CFR § 1.53(d), and the appropriate filing fee.

28. Inventor Smith prepared and filed on February 11, 1997, a provisional application regarding a machine Smith invented in the United States on November 5, 1996. A Notice to File Missing Parts dated March 6, 1997, informed Smith that the filing fee was omitted, and that the filing fee along with the surcharge are required. The Notice set a period for reply which was two months from the filing date. Smith failed to pay the filing fee and the required surcharge. The provisional application became abandoned. A Notice of Abandonment, dated May 11, 1997, was sent to Smith. Smith engaged practitioner P to prepare and file a patent application, and informed P that Smith had filed a provisional application on February 11, 1997. On February 11, 1998, P filed a complete nonprovisional patent application for Smith, claiming benefits under 35 U.S.C. 119(e) of the filing date of the provisional application. On March 4, 1998, Smith furnished P with a copy of a publication by Allon, dated February 2, 1997, fully describing the machine and a manner of making and using the machine. Also on March 4, 1998, Smith gave P copies of the two notices. P, upon asking Smith why no reply had been filed to either notice, learned that Smith had been hospitalized for a heart attack and ensuing complications from March 5 through May 4, 1997, and Smith's significant other put the notices away without opening or showing them to Smith so as not to disturb Smith, and then forgot about the notices. Smith first learned of the notices on March 3, 1998, while sorting through papers to prepare Smith's 1997 income tax return. To properly protect Smith's patent rights, the most appropriate course of action for P to take is

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- (A) to do nothing inasmuch as the regulations no longer provide for revival of an abandoned provisional application after a nonprovisional application has been filed.
 - (B) to promptly file a request to withdraw the holding of abandonment explaining that abandonment was improper inasmuch as Smith's significant other had withheld the notices from Smith, and Smith had not received the notices. Also, with the request file the filing fee, a copy of the Allon publication, and an explanation of the relevance of the Allon publication.
 - (C) to promptly file a petition requesting the Commissioner to exercise his supervisory authority to withdraw the holding of abandonment as improvident inasmuch as Smith's significant other had withheld the notices from Smith, and Smith had not received the notices.
 - (D) promptly file a petition and fee to revive the provisional application as being unintentionally abandoned, the appropriate surcharge, the filing fee, and a statement that the entire delay was unintentional. Also file in the nonprovisional application an IDS listing the Allon publication along with a copy of the Allon publication, and an explanation of the relevance of the Allon publication to the claims in the patent application.
 - (E) promptly file a petition and fee for a two month extension of time, a petition and fee to revive the provisional application as being unintentionally abandoned, the filing fee, and a statement that the entire delay was unintentional.

29. On September 10, 1997, Smith invented a process for implanting processing chips in human heads. The chips permit the human to control replies when angered. Smith filed a *pro se* patent application in the PTO on the process on November 17, 1997. Shortly afterwards, Smith was hired by EZ Corporation, a processor and distributor of chips. During the pendency of the Smith patent application, on January 3, 1998, Smith invented an improvement to the process, and pursuant to Smith's employment agreement, Smith executed an assignment of the improved process invention to EZ Corporation. You are patent counsel for EZ Corporation. Pursuant to instructions, you prepared a patent application on the improved process invention. On February 3, 1998, you filed a complete patent application together with the executed assignment in the PTO. The application filed on February 3, 1998, in addition to disclosing the process disclosed in the *pro se* application, also disclosed and claimed only the improved process. The first sentence of the specification in the application filed on February 3, 1998, stated that the application was a CIP of the copending *pro se* Smith patent application, which was adequately identified therein. On May 11, 1998, the *pro se* Smith patent application became abandoned. On June 4, 1998, all the claims to the improved process in the application filed on February 3, 1998, were rejected by the primary examiner as unpatentable under 35 U.S.C. § 103 over a U.S. patent that issued on March 3, 1998, on an application that was filed on December 11, 1995. Which of the following actions accords with proper PTO practice and procedure, and represents the most appropriate action for overcoming the examiner's rejection?

- (A) File a reply which argues that the claims of the present application are nonobvious over the U.S. Patent issued on March 3, 1998.
- (B) File a reply which argues that since Smith is the same inventor named in the previously filed *pro se* application, and since the CIP application contains a specific reference to the earlier filed application, the CIP application is entitled to the benefit of the earlier filing date in accordance with 35 U.S.C. § 120 for purposes of the improvement process claims.
- (C) File an affidavit under 37 CFR § 1.132 presenting test data showing that the process in the CIP application is significantly superior to the process in the *pro se* application.
- (D) File a reply which argues that the reference patent cannot be the basis of a rejection because its issue date postdates the filing date of the CIP application.
- (E) File an affidavit under 37 CFR § 1.131 swearing back of the reference filing date.

30. Inventor X, a citizen of Germany, invented a tape dispenser in Germany on May 5, 1996. On January 22, 1997, X filed a patent application for the tape dispenser in the German Patent Office. On January 22, 1998, you filed a complete U.S. patent application in the PTO claiming a tape dispenser on behalf of X. The U.S. application was filed with a declaration under 37 CFR § 1.63 signed by X claiming foreign priority of the German patent application. In an Office action dated June 17, 1998, and setting a three month shortened statutory period for reply, a primary patent

examiner properly rejected all the claims in the U.S. patent application as being anticipated under 35 U.S.C. § 102(a) by the disclosure in magazine articles describing how to make and use an identical tape dispenser. The articles were published in the United States in February 1997, and in Great Britain in March 1997. Which of the following actions accords with proper PTO practice and procedure, and represents the most appropriate action for overcoming the rejection?

- (A) On or before September 17, 1998, file a certified copy of the German application, and an English translation of the German application.
- (B) On or before September 17, 1998, file a certified copy of the German application, an English translation of the German application, and point out that the reference is no longer available as prior art.
- (C) File a reply on or before September 17, 1998, which argues that the reference cannot be used because the application inventor X filed in the German Patent Office antedates the article.
- (D) File an affidavit under 37 CFR § 1.132 signed by you stating that the reference cannot be used because the application which inventor X filed in the German Patent Office antedates the articles.
- (E) File a petition to have the Commissioner exercise his supervisory authority and withdraw the rejection stating that the reference cannot be properly used inasmuch as the declaration under 37 CFR § 1.63 makes clear that the application inventor X filed in the German Patent Office antedates the articles.

31. Which of the following utility statements, which correspond in scope to the subject matter sought to be patented, is sufficient to meet the requirements of 35 U.S.C. §§ 101 and 112, first paragraph?

- (A) The invention is a novel process for making certain steroids which, in turn, are known to be useful in the formation of A-nor steroids. There is nothing in the record of the application file showing that any "A-nor steroid" which might ultimately be produced from the claimed compounds would itself be a useful product.
- (B) The invention is a composition which is the cure for all cancer.
- (C) The invention is a novel composition using a new source of stannous tin for incorporation in dentifrices by which term is meant mouth washes, tooth pastes, tooth powders and chewing gums, i.e., compositions for introduction into the oral cavity as cleansing compositions.
- (D) The invention is a composition which prevents the process of aging.
- (E) The invention is a device that increases the efficiency of an engine from 35% to 110%.

32. In connection with an appeal to the Board of Patent Appeals and Interference's, which of the following rejections would be a new ground of rejection?

- (A) In a final Office action, Claim 1 is rejected under 35 U.S.C. § 103 over A in view of B. On appeal, in the examiner's answer, the primary examiner again states that Claim 1 is rejected under 35 U.S.C. § 103 over A in view of B, but the actual argument or rationale supporting the rejection, while having the same basic thrust as the argument or rationale advanced in the final rejection differs therefrom.
- (B) In a final Office action, Claim 6 is rejected under 35 U.S.C. § 103 over A in view of B, and Claim 8 is rejected under 35 U.S.C. § 103 over A in view of C. No claim was rejected under 35 U.S.C. § 103 over A in view of B and C. In reply, an amendment proposes to combine the limitations of Claims 6 and 8 together in a new claim, Claim 9, and canceling Claims 6 and 8. In an advisory action, the primary examiner permits entry of the amendment as reducing issues on appeal. On appeal, in the examiner's answer, the primary examiner rejects Claim 9 under 35 U.S.C. § 103 over A in view of B and C, supported by the argument advanced in the rejections of Claims 6 and 8.
- (C) In a final Office action, Claims 1 and 2, where Claim 2 depends on Claim 1, are rejected under 35 U.S.C. § 103 over A in view of B. In reply, an amendment proposes to rewrite Claim 2 in independent form and cancel Claim 1. In an advisory action, the primary examiner advises that the proposed amendment will be entered as reducing issues on appeal, and that the final rejection would be used to reject Claim 2 as amended. On appeal, in the examiner's answer, the primary examiner rejects Claim 2 under 35 U.S.C. § 103 over A in view of B, supported not only by the argument advanced in the rejections of Claims 1 and 2, but also by rationale not advanced in the final rejection, though the rationale has the same thrust as the rationale in the final Office action.
- (D) In a final Office action, Claims 2 and 3 are rejected under 35 U.S.C. § 103 over A in view of B. In reply, an amendment proposes to cancel Claims 2 and 3, and add Claim 4, which incorporates the limitations of Claims 2 and 3. In an advisory action, the primary examiner advises that the proposed amendment will be entered, and that the final rejection would be used to reject the added Claim 4. On appeal, in the examiner's answer, the primary examiner rejects Claim 4 under 35 U.S.C. § 103 over A in view of B, supported by the argument advanced in the rejections of Claims 2 and 3.
- (E) In a final Office action, Claim 3 is rejected under 35 U.S.C. § 103 over A in view of B, and Claim 4 is rejected under 35 U.S.C. § 103 over A in view of C. In reply, an amendment proposes to combine the limitations of Claims 3 and 4 together in a new claim, Claim 5, and canceling Claims 3 and 4. In an advisory action, the primary examiner denies entry of the proposed amendment as not reducing issues on appeal. On appeal, in the examiner's answer, the primary examiner states that Claim 3 has been rejected under 35 U.S.C. § 103 over A in view of B, and claim 4 has been rejected under 35 U.S.C. § 103 over A in view of C, and supports the

rejections by expanding upon the arguments advanced in the final Office action.

33. The practitioner timely files an appeal brief together with an Information Disclosure Statement (IDS) disclosing references X and Y, an appropriate certification, a petition requesting consideration of the IDS, and the appropriate petition fee. References X and Y were not previously of record in the application. The primary examiner properly concludes that new rejections must be made of Claim 1 under 35 U.S.C. § 102(b) over X, and Claims 1 and 2 under 35 U.S.C. § 103 over X in view of Y. With the approval of a supervisory patent examiner, the primary examiner reopens prosecution, and enters the rejections in an Office action. Which of the following actions accords with proper PTO practice and procedure, and represents the most appropriate action for overcoming the primary examiner's rejections?

- (A) The practitioner files a reply under 37 CFR § 1.111 together with an amendment rewriting Claim 1 to incorporate the limitations of Claim 2, and canceling Claim 2; a declaration under 37 CFR § 1.132 showing that the invention set out in amended Claim 1 produces unexpected results; and arguments in the reply pointing out the supposed errors in the examiner's rejection, and replying to each ground of rejection.
- (B) The practitioner may timely file a reply brief arguing that Claim 1 is not anticipated by reference X, and file an affidavit under 37 CFR § 1.132 in support of an argument that the invention set out in Claim 2 provides unexpected results not suggested by references X and Y.
- (C) The practitioner requests reinstatement of the appeal, and files a supplemental appeal brief accompanied by an amendment canceling Claim 1, and amending Claim 2. In the supplemental appeal brief, the practitioner argues that the rejections of Claims 1 and 2 are overcome by the amendment to the claims. The practitioner does not argue that Claims 1 and 2 are patentable independent of the amendment.
- (D) The practitioner requests reinstatement of the appeal, and files a supplemental appeal brief accompanied by an amendment canceling Claim 1, and a declaration under 37 CFR § 1.132 showing that the invention set out in Claim 2 produces unexpected results. In the supplemental appeal brief, the practitioner argues that the rejections have been overcome. The amendment and declaration are necessary to overcome the rejection.
- (E) The practitioner files a reply brief arguing that the examiner is not permitted to reopen prosecution and reject the claims, and arguing that the rejections are in error based on the practitioner's statement that the invention provides unexpected results. The practitioner's statement is otherwise unsubstantiated by evidence in the record.

34. On November 6, 1997, the practitioner filed a complete patent application, filing fee, and declaration under 37 CFR § 1.63 identifying inventors A and B by their full names, and providing their residence, post office addresses, and citizenship. Inventors A and B did not assign, and were under no obligation to assign their rights in the invention to any other party. A primary examiner required restriction between the invention of Claims 1-5, and the invention of Claims 6-10. The practitioner elected the invention of Claims 1-5. The examiner withdrew Claims 6-10 from consideration. On July 15, 1998, the practitioner filed a reply to a first Office action dated May 8, 1998, which did not set a period for reply. In the reply, Claims 6-10 were canceled, and Claims 1 and 3 were amended by adding limitations supported by information disclosed, but unclaimed in the application. The limitations were substantially embraced by the statement of invention in the application. Claim 1 is an independent claim, and Claims 2-5 depend directly or indirectly from Claim 1. On August 1, 1998, inventors A and B then provided the practitioner with information clearly showing that Claims 1-5, as amended, were not the joint invention of A and B, and that such error arose without deceptive intent. Which of the following actions fulfills proper PTO practice and procedure for correcting inventorship?

- (A) Where the information shows that A is the sole inventor of Claims 1-5, as amended, the practitioner should file an amendment to name only A as the sole inventor of the invention set forth in Claims 1-5, together with a statement by the practitioner to correct the inventorship. The foregoing should be filed promptly, and preferably before the next Office action.
- (B) Where the information shows that A and C are joint inventors of Claims 1-5, as amended, the practitioner should file an amendment deleting B as an inventor, and adding C as a joint inventor. The amendment should be accompanied by a petition including a statement by B and C that the error in inventorship occurred without deceptive intent on their part, a statement identifying B as the named inventor who is being deleted and acknowledging that B's invention is no longer being claimed, and a statement by C that the amendment is necessitated by the amendment of the claims. An oath or declaration under 37 CFR § 1.63 by A and C should also accompany the amendment. The foregoing should be filed promptly, and preferably before the next Office action.
- (C) Where the information shows that A is the sole inventor of Claims 1-5, as amended, the practitioner should file a properly completed request on a separate paper for a continuation application as a continued prosecution application. The request names as inventor only A, and is accompanied by the proper filing fee, and a statement by the practitioner requesting the deletion of B as inventor inasmuch as B is not an inventor of the invention being claimed in the new application. The foregoing should be filed before an issue fee is paid in the prior application, or before the prior application is abandoned.
- (D) Where the information shows that A and C are joint inventors of Claims 1-5, as amended, the practitioner should file a properly completed request on a separate paper for a continuation application as a continued prosecution application. The request names as inventors A and C, and is accompanied by the proper filing fee,

and a statement by the practitioner requesting the deletion of B as inventor inasmuch as B is not an inventor of the invention being claimed in the new application, and addition of C as an inventor. The request is accompanied by a new declaration under 37 CFR § 1.63 naming A and C as the inventors. The foregoing should be filed before an issue fee is paid in the prior application, or before the prior application is abandoned.

- (E) All of the above.

35. During the pendency of inventor Smith's first patent application, he filed a request for a Continued Prosecution Application (CPA). On February 4, 1998, a primary examiner again rejected Claims 1-4 in the CPA application under 35 U.S.C. § 103 over references X and Y, and again rejected Claim 5 under 35 U.S.C. § 103 over references X, Y, and Z. The examiner did not set a shortened statutory period for reply. On August 4, 1998, the practitioner filed a notice of appeal to the Board of the Patent Appeals and Interferences from the examiner's decision rejecting Claims 1-5. Claims 6-10 in the CPA application stand allowed. Which of the following actions was not in accord with proper PTO practice and procedure regarding the appeal and Smith's CPA application?

- (A) The practitioner timely filed the notice of appeal containing an authorization to charge fees to a deposit account, which is signed by the practitioner.
- (B) The practitioner timely filed the notice of appeal containing an authorization to charge the appeal fee to a deposit account which is signed by the practitioner and does not specify which claims are appealed.
- (C) The practitioner timely filed the notice of appeal containing an unsigned authorization to charge the appeal fee to a deposit account; the notice of appeal specifies which claims are appealed.
- (D) The practitioner timely filed an unsigned notice of appeal; the notice of appeal specifies which claims are appealed; a proper authorization to charge fees to a deposit account accompanied the notice of appeal.
- (E) The practitioner timely filed the notice of appeal which was signed by the practitioner; the notice of appeal specifies which claims are appealed; the appropriate fee accompanies the notice of appeal. An appeal brief was filed with a request for extension of time and the requisite fee seven months after the notice of appeal was filed.

36. Which of the following statements regarding a CPA application is correct?

- (A) A proper CPA division application is filed on August 17, 1998, where, on February 20, 1998, a final Office action setting a three month shortened statutory period for reply was mailed in a prior application; and on August 17, 1998, a request is filed by facsimile for a CPA division application of the prior application; the request, signed by the practitioner, includes an authorization to charge small entity fees under 37 CFR § 1.16 to a deposit account, identifies the correct application number of the prior application; and refers to and is accompanied by a preliminary amendment causing the CPA application to have two independent claims, and 12 dependent claims.
- (B) A CPA continuation application stands abandoned where, before the abandonment of a prior application wherein there was a final rejection, a request was filed in the PTO on December 8, 1997, for a CPA continuation application of the prior application; the request was filed without a filing fee; the PTO sent to the practitioner a Notice To File Missing Parts of Application dated December 17, 1997, requiring payment of the \$790.00 filing fee, and \$130.00 surcharge on or before February 17, 1998; and on July 17, 1998, the practitioner files a petition and check covering the fees for a five month extension of time, the filing fee, and surcharge.
- (C) An improper, as opposed to a proper CPA division application, has been filed where a Notice of Allowance and Issue Fee Due setting a three month statutory period for reply was mailed in a prior application on February 4, 1998; the issue fee was never paid; a completed request for a CPA division application was filed in the PTO on May 6, 1998, with a certificate of mailing by first class mail under 37 CFR § 1.8; the certificate is dated May 4, 1998; and the request correctly identifies the application number of the prior application and is signed by the practitioner.
- (D) A proper CPA continuation application has been filed where a provisional application was filed in the PTO on August 12, 1997; a completed request for a CPA continuation application was filed by hand delivery in the PTO on August 11, 1998; and the request correctly identifies the application number of the prior provisional application and is signed by the practitioner.
- (E) A design application may be properly filed as CPA divisional application of a prior utility application by filing, during the pendency of the prior utility application, a completed request, signed by the practitioner, which correctly identifies the application number of the prior application, together with a preliminary amendment canceling the original specification and substituting a design specification.

37. In an original patent application having Claims 1 through 10, where Claims 1 and 4 are independent claims, a primary examiner properly rejected Claims 1-5 under 35 U.S.C. § 112, second paragraph, and Claims 4-10 under 35 U.S.C. § 103 over a combination of prior art references. The Office action set a three month shortened statutory period for reply. A patent practitioner's reply (both amendment and arguments) addressed the rejections of Claims 4-10 under 35 U.S.C. § 103 and of Claims 4 and 5 under 35 U.S.C. § 112, but failed to reply to the rejection of Claims 1-3 under 35 U.S.C. § 112, second paragraph. Which of the following does not comply with PTO practice and procedure regarding the reply?

- (A) If the Office action was a non-final Office action on the merits dated January 12, 1998, and the reply was filed on Monday, April 13, 1998; then the examiner, in a communication dated April 17, 1998, may properly call attention to the omission of a reply to the rejection of Claims 1-3, and set a one month shortened statutory period to complete the reply, and the practitioner may properly avoid abandonment of the application by filing on Tuesday, October 17, 1998, a request and fee for a five month extension of time, and a reply to the rejection of Claims 1-3 under 35 U.S.C. § 112, second paragraph.
- (B) If the Office action was a final Office action dated January 12, 1998, and the reply was filed on Monday, April 13, 1998, and in an Advisory action dated April 20, 1998, the examiner informed the practitioner that the amendment in the reply did not *prima facie* place the application in condition for allowance; then the practitioner may properly avoid abandonment of the application by filing, on July 10, 1998, a notice of appeal and appeal fee.
- (C) If the Office action was a non-final Office action on the merits dated January 12, 1998, and the reply was filed on Monday, April 13, 1998; then the primary examiner, in a communication dated April 17, 1998, may properly call attention to the omission of a reply to the rejection of Claims 1-3 and set a one month shortened statutory period to complete the reply, and the practitioner can properly achieve copendency between the application and a continuing application by filing a request and filing fee for a continued prosecution application on or before May 13, 1998, all without completing the reply.
- (D) If the Office action was a second, final Office action on the merits dated September 9, 1997, and the reply was filed on March 9, 1998, together with a request and fee for a three month extension of time; and if the examiner informed the practitioner in the second, final Office action that the same rejection of Claims 1-3 under 35 U.S.C. § 112, second paragraph, had been made in the first, non-final Office action and that there was an omission of a reply to the rejection of Claims 1-3 in the practitioner's reply to the first, non-final Office action; then the examiner may properly determine that the omission in the reply filed on March 9, 1998, was not inadvertent, so inform the practitioner in an Advisory action, and the application becomes abandoned for an incomplete reply.
- (E) All of the above.

38. Inventor A, with the assistance of a registered patent practitioner P, filed a patent application. The PTO mailed to P an Office action. P, a sole practitioner, received the Office action. The application became abandoned for failure to respond within the three month shortened statutory period for reply specified in the Office action. A asked P every three months about the status of the application. P always advised A that the application was pending. P did not revive the application. Using letters, and billing A for work not performed in the application, P misled A into believing that the application was pending. Inventor A first learned of the abandoned status of the application in a telephone conversation with the primary examiner on June 12, 1998. On June 14, 1998, A engaged another practitioner, X, to assist in reviving and prosecuting the application. Since June 12, 1998, P has refused to respond to letters he received from A and X by certified mail, or to telephone calls from A and X, wherein A and X have requested P to provide a factual statement explaining what occurred. Inventor A, with the assistance of practitioner X, filed a petition to revive the application on August 25, 1998. Which of the following complies with PTO practice and procedure for a petition to revive an application for unavoidable delay in replying to an Office action?

- (A) Where the application was filed on May 9, 1995, and became abandoned on March 5, 1997, for no reply to an Office action dated December 4, 1996, file a petition, accompanied by the petition fee, a terminal disclaimer for 17 months which is proper in all formal respects, the disclaimer fee, the required reply, and a showing, corroborated by supporting documents and affidavits from A and X, demonstrating that P failed to inform A of the Office action, A had sought status information from P every three months since November 1996, P misled A regarding the status of the application, and P has failed to respond to communications requesting P's assistance in reviving the application, and the entire delay was unavoidable.
- (B) Where the application was filed on June 10, 1996, and became abandoned on March 21, 1997, for no reply to an Office action dated December 20, 1996, file a petition, accompanied by the petition fee, a terminal disclaimer for 17 months which is proper in all formal respects, the disclaimer fee, the required reply, and an affidavit signed by X stating that P failed to inform A of the Office action, A had sought status information from P every three months since November 1996, P misled A regarding the status of the application, and P has failed to respond to communications requesting P's assistance in reviving the application, and the entire delay was unavoidable.
- (C) Where the application was filed on April 10, 1997, and became abandoned on May 6, 1998, for no reply to an Office action dated November 5, 1997, file a petition, accompanied by the petition fee, the required reply, and an affidavit signed by X stating that P failed to inform A of the action, P misled A regarding the status of the application, and P has failed to respond to communications from A and X requesting P's assistance in reviving the application.
- (D) Where the application was filed on April 10, 1997, and became abandoned on February 6, 1998, for no reply to an Office action dated November 5, 1997, file a petition to revive accompanied by a terminal disclaimer for 3 months which is

proper in all formal respects, an authorization to charge any required fees to a designated account, the required reply, and an affidavit signed by A stating that P failed to inform A of the action, and that A was damaged by P's conduct at least to the extent that A had incurred additional fees and expenses for the petition, and the entire delay was unavoidable.

(E) None of the above.

39. The Jones patent application was filed in the PTO in January 1998. Jones conceived and reduced the claimed invention to practice in the United States. A claim in the application has been rejected under 35 U.S.C. § 102 as being unpatentable over a U.S. patent to Smith. Smith did not derive anything from Jones, or visa versa, and at no time were Smith and Jones obligated to assign their inventions to the same employer. In which of the following situations should a declaration by Jones under 37 CFR § 1.131 overcome the rejection in accordance with proper PTO practice and procedure?

- (A) The rejected claim is drawn to a genus. The Smith patent issued in March 1997, on an application filed in June 1993. The patent discloses, but does not claim, a single species of the genus claimed by Jones. The declaration shows completion in April 1993, of the same species disclosed by Smith.
- (B) The rejected claim is drawn to a species. The Smith patent issued in March 1997, on an application filed in June 1993. The patent discloses, but does not claim, the species claimed by Jones. The declaration shows completion in April 1993, of a different species.
- (C) The rejected claim is drawn to a genus. The Smith patent issued in March 1997, on an application filed in June 1993. The patent discloses, but does not claim, several species within the genus claimed by Jones. The declaration shows completion in April 1993, of a species different from the reference's species and the species within the scope of the claimed genus.
- (D) The rejected claim is drawn to a genus. The Smith patent issued in March 1996, on an application filed in June 1993. The patent discloses, but does not claim, several species within the genus claimed by Jones. The declaration shows completion in April 1993, of one or more of the species disclosed in the patent.
- (E) The rejected claim is drawn to a genus. The Smith patent issued in November 1997, on an application filed in June 1993, and the patent discloses and claims several species within the genus claimed by Jones. The declaration shows completion in April 1993, of each species claimed in the Smith patent.

40. On August 12, 1998, reexamination was ordered of the Smith patent based on a proper substantial new question of patentability. The Smith patent was granted on September 12, 1995, on a patent application filed on July 2, 1992. Considering each of the following situations separately from the other, which of the situations complies with PTO practice and procedure regarding a rejection of Claims 1-5 in the Smith patent?

- (A) Claims 1-5 are rejected as being obvious under 35 U.S.C. § 103 over Jones in view of Winslow. The Jones patent issued in 1990, and the Winslow patent issued in 1989. In the application filed on July 2, 1992, Claims 1-5 were rejected under 35 U.S.C. § 103 over Jones in view of Winslow on the same rationale, and the same claimed subject matter was in Claims 1-5 in the application and patent.
- (B) Claims 1-5 are rejected as being anticipated under 35 U.S.C. § 102 (b) over Jiles, a British patent specification published on April 16, 1991. Claims 1-5 are drawn to irradiating a broad genus of "fungus material" first disclosed in the application filed July 2, 1992. The Smith application filed on July 2, 1992, was a continuation-in-part application of an application filed on March 21, 1990, and claims the benefit of the filing date of the application filed on March 21, 1990. The application filed on March 21, 1990, did not disclose or support treating a broad genus of "fungus material," but disclosed irradiating only a fungus species.
- (C) Claims 1-5 are rejected as being anticipated under 35 U.S.C. § 102 (b) over Janes, a British trade journal published on April 16, 1991. Claims 1-5 are drawn to electrolytically etching a metal. The British trade journal describes a species with the broad scope of Claims 1-5. The rejection can be overcome by antedating the reference by filing Smith's declaration under 37 CFR § 1.131 showing that Smith reduced the claimed invention to practice prior to April 16, 1991 in the United States.
- (D) Claims 1-5 are rejected as constituting obviousness type double patenting with Claims 6 and 7 of the U.S. patent to Johns, which issued on August 5, 1997. Claims 1-5 in the Smith patent have not been amended as of the date of the rejection. The U.S. patent to Johns formed the basis of a provisional obviousness type double patenting rejection during the initial prosecution of the Smith application.
- (E) Claims 1-5 are rejected under 35 U.S.C. § 102(f) over an unpublished transcript of testimony given by Smith. The testimony clearly establishes that Smith is not the inventor of the subject matter of Claims 1-5. Smith neither suggested the claimed subject matter, nor participated in any manner in the reduction to practice of the invention. Smith merely funded the research by Jones, who conceived and invented the claimed subject matter.

41. In regard to the Jones application, a complete Office action dated January 20, 1998, and setting a three month shortened statutory period for reply was mailed to the office of the attorney of record. The Office action contains rejections under 35 U.S.C. §§ 112 and 102. Considering separately the following different circumstances regarding the Office action, which course of action by the attorney complies with proper PTO practice and procedure and will correct the problem?

- (A) The Office action is in an envelope postmarked January 20, 1998, and was received in the attorney's office on Friday, January 30, 1998, due to delays in the U.S. Postal Service. The attorney should file and the PTO should grant a petition to restart the previously set reply period to run from the date of receipt of the Office action if the petition is filed on or before Friday, February 13, 1998, and the petition includes evidence showing the date of receipt, and the attorney's statement setting forth the date of receipt.
- (B) The Office action is in an envelope postmarked January 22, 1998, and was received in the attorney's office on Friday, January 30, 1998. The attorney should file and the PTO should grant a petition to restart the previously set reply period to run from the date of receipt of the Office action if the petition is filed on or before Friday, February 13, 1998, and the petition includes evidence showing the address on the Office action, a copy of the envelope which contained the Office action showing the postmark date, and the attorney's statement setting forth the date the Office action was received at the attorney's office and that the Office action was received in the postmarked envelope.
- (C) The Office action is in an envelope postmarked January 22, 1998, and was received in the attorney's office on Friday, January 30, 1998. The attorney should file and the PTO should grant a petition to restart the previously set reply period to run from the postmark date on the envelope if the petition is filed on April 30, 1998, with a reply to the Office action, and the petition includes evidence showing the address on the Office action, a copy of the envelope which contained the Office action showing the postmark date, and the attorney's statement setting forth the date the Office action was received at the attorney's office and that the Office action was received in the postmarked envelope.
- (D) A Notice of Abandonment dated August 19, 1998, is received in the attorney's office. The attorney should file and the PTO should grant a petition to revive the application as unavoidably abandoned where the petition is filed on September 24, 1998, contains the attorney's statement that the Office action was not received by the attorney, and is accompanied by the appropriate petition fee and a proposed reply is not included.
- (E) None of the above.

42. Which of the following, published before the effective filing date of an application, is not an enabling prior art reference when used as anticipatory prior art under 35 U.S.C. § 102?

- (A) A picture of a chair in a magazine. The magazine is published monthly in England. The picture shows all of the structural features recited in the application claims, and how they are put together.
- (B) Disclosure in a magazine article of the compound claimed in the application wherein only the compound is claimed. The magazine is published monthly in the United States. The article discloses a manner of making the compound which differs from the manner disclosed in the application. No utility for the compound is disclosed in the article.
- (C) Disclosure in a magazine article of a liquid named "Rejuvenator Juice." The magazine is published monthly in the United States. The article discloses that the liquid restores youth when ingested. The article does not disclose the composition or manner of making the liquid. The application has claims directed to a liquid composition which is described in the specification as restoring youth when ingested.
- (D) The drawings in a U.S. design patent disclose all the structural features recited in the claims of the application. The drawings also show how the features are combined.
- (E) Disclosure of a table in a magazine published in the United States. The disclosure, including a picture, describes and shows how all of the claimed features are united in the table.

43. Five different situations are presented below wherein the attorney of record calls an error to the attention of the examiner. Which request (or lack of request) by the attorney, and reply by the examiner is not in accord with proper PTO practice and procedure?

- (A) An Office action dated February 11, 1998, and setting a three month shortened statutory period for reply was accompanied by a citation of references wherein a prior art patent was identified with an incorrect patent number. The attorney of record, on April 6, 1998, called the error to the attention of the examiner and requested that the examiner restart the reply period. The attorney should receive from the examiner a new citation of references correcting the error, a copy of the Office action redated, and a communication restarting the three month shortened statutory period for reply to run from the date the error is corrected.
- (B) A page of rejections is omitted from an Office action dated April 21, 1998, which set a three month shortened statutory period for reply. The attorney of record, on May 25, 1998, called the error to the attention of the examiner and requested that the examiner set a new reply period. The attorney should receive from the examiner a complete, redated Office action setting a three month shortened statutory period for reply to run from the date the error is corrected.
- (C) A copy of a patent reference is omitted from an Office action dated April 21, 1998,

which set a three month shortened statutory period for reply. The attorney of record, on May 25, 1998, called the error to the attention of the examiner and requested that the reply period be reset. The attorney should receive from the examiner a copy of the omitted patent reference, and a communication resetting the reply period to be a two month shortened statutory period running from the date the error is corrected.

- (D) A copy of a patent reference was omitted from an Office action dated April 16, 1998, which set a three month shortened statutory period for reply. The attorney of record, on May 19, 1998, called the error to the attention of the examiner, but did not request that the examiner set a new reply period. The attorney should receive from the examiner a copy of the omitted patent reference with a letter noting that the time period set for reply remains as set forth in the Office action dated April 16, 1998.
- (E) A copy of a patent reference was omitted from an Office action dated March 9, 1998, which set a three month shortened statutory period for reply. The attorney of record, on July 14, 1998, called the error to the attention of the examiner and requested that the reply period be reset. The attorney should receive from the examiner a copy of the omitted patent reference with a letter noting that the time period set for reply remains as set forth in the Office action dated March 9, 1998.

44. Your client, the Happy Co., has come to you and requested that you file an international application under the Patent Cooperation Treaty (PCT) which designates Canada, Mexico, and the European Patent Office. Since today, August 26, 1998, is the last day of the Paris Convention priority year, you are rushing to prepare an application which will be granted an international filing date. Given the following elements, which combination is necessary to have an international filing date granted?

- I. The designation of at least one PCT contracting state.
- II. The payment of the international fee.
- III. A part of the application which appears to be a claim.
- IV. The name(s) of the inventor(s).
- V. An application in a language prescribed by the receiving office.

- (A) I, II, and III.
- (B) I, III, and V.
- (C) I and III.
- (D) II and V.
- (E) I, III, IV, and V.

45. The practitioner filed a patent application for inventor Jones on February 7, 1996. An Office action dated September 10, 1997, was a second action, final rejection of all the claims in the Jones application, and set a three month shortened statutory period for reply. On March 4, 1998, the practitioner filed a reply, containing an amendment and arguments which the practitioner and Jones believed would place the application in condition for allowance, a request for a three month extension of time, and the appropriate extension of time fee. In the ensuing different factual scenarios presented below, which course of action by the practitioner is in accord with proper PTO practice and procedure?

- (A) The practitioner did not file a notice of appeal and appeal fee on or before March 10, 1998. An Advisory action dated March 24, 1998, informed the practitioner that the amendment was not entered, and a Notice of Abandonment dated April 11, 1998, informed the practitioner that the application was abandoned. Thereafter, the practitioner should file, on or before Monday, July 13, 1998, a petition to revive the application as unintentionally abandoned, together with the appropriate petition fee, a notice of appeal and appeal fee, and a statement that the entire delay in filing the notice of appeal and fee from the due date for the reply until the filing of a grantable petition was unintentional.
- (B) The practitioner did not file a notice of appeal and appeal fee on or before March 10, 1998. An Advisory action dated March 24, 1998, informed the practitioner that the amendment was not entered. A Notice of Abandonment dated April 11, 1998, informed the practitioner that the application was abandoned. Thereafter, the practitioner should file, on or before Monday, July 13, 1998, a petition to revive the application as unavoidably abandoned, together with the appropriate petition fee, a notice of appeal and appeal fee, and a statement that the entire delay in filing the notice of appeal and fee from the due date for the reply until the filing of a grantable petition was unavoidable since it was believed that the reply placed the case in condition for allowance, and notice to the contrary was not given until after expiration of the reply period and any available extension thereof.
- (C) The practitioner did not receive a Notice of Allowance and Issue Fee Due dated March 24, 1998, mailed to him. However, the practitioner did receive a Notice of Abandonment dated July 11, 1998, informing him of the application's abandonment for nonpayment of the issue fee. Thereafter, the practitioner should file, on or before October 11, 1998, a petition to revive the application as unavoidably abandoned, together with the appropriate petition fee, a continuing application, and a statement that the entire delay in filing the continuing application from the due date for filing an issue fee until the filing of a grantable petition was unavoidable.
- (D) The practitioner, after receiving a Notice of Allowance and Issue Fee Due dated March 24, 1998, was informed by Jones not to pay the issue fee until the industry or a competitor showed interest in the invention. The practitioner received a Notice of Abandonment dated July 11, 1998, advising of the application's abandonment for nonpayment of the issue fee. Jones advised the practitioner on

August 24, 1998, that such interest was expressed to Jones on the preceding day. Thereafter, the practitioner should file, on or before Monday, November 9, 1998, a petition to revive the application as unavoidably abandoned, together with the appropriate petition fee, and issue fee, and a statement that the entire delay in filing the issue fee from the due date for the fee until the filing of a grantable petition was unavoidable.

- (E) All of the above.

46. John Doe, an employee of the National Radio Company (NRC), while serving his two week summer reserve duty obligation with the U.S. Air Force, and while working in the research labs at Wright-Patterson Air Force Base, jointly with Jane Roe, an Air Force civil service employee, conceived and actually reduced to practice a unique transponder. As patent counsel for the Air Force, you reviewed the submitted invention disclosure and prepared a patent application therefrom naming John Doe as sole inventor. You then had John Doe execute an assignment to the Air Force as well as the necessary oath, petition, and power of attorney naming you attorney of record, and filed the complete application and assignment with the PTO. In the course of prosecution, the examiner issued an Office action provisionally rejecting all the claims in the application as unpatentable under 35 U.S.C. §§ 102(e)/103 based on a copending application assigned to the Air Force. Which of the following actions, if taken by you, would not accord with proper PTO practice and procedure?

- (A) File a reply to the Office action traversing the rejection accompanied by an assignment executed by John Doe to the Air Force along with (1) a petition for correction of inventorship including a statement of facts verified by John Doe establishing when the error without deceptive intention was discovered and how it occurred, (2) an oath or declaration by John Doe and Jane Roe, and (3) the appropriate fee.
- (B) File a reply to the Office action traversing the rejection accompanied by an assignment executed by John Doe to the Air Force along with an affidavit of common ownership of the two inventions claimed in the copending applications signed by you.
- (C) File a reply to the Office action traversing the rejection accompanied by an assignment executed by John Doe to the Air Force along with a certificate of mailing under 37 CFR § 1.8.
- (D) (A) and (B)
- (E) (B) and (C)

47. Smith, an electrical engineer working as an independent contractor, entered into a contract to install an emergency generator at the research facilities of the Wesson Cellular Phone Company. The contract contained no patent rights clause. While so employed, Smith had an opportunity to observe the research work being done and to chat with the Wesson research staff. Smith soon developed an interest in the research work being done, and realized that he could improve on the operation of the Wesson cellular phone. Soon afterwards, Smith designed a unique link scanning switching control mechanism which significantly improved the operation of the Wesson cellular phone. Wesson quickly recognized the importance of using Smith's invention in its business, and retained the services of Mr. I. M. Goody, a registered patent agent who is not an attorney. Which of the following actions by Mr. Goody would (1) best serve his client's business interests, (2) accord with proper PTO practice and procedure, and (3) be consistent with the PTO Code of Professional Responsibility?

- (A) Negotiate with Mr. Smith for an assignment of his invention to Wesson, draft an assignment agreement and have the same executed by Smith and Wesson, and record the original executed assignment with the assignment branch of the PTO.
- (B) Negotiate with Mr. Smith for an assignment and disclosure of his invention to Wesson, draft an assignment agreement and a patent application on the Smith invention, have both the assignment agreement and a combined oath, and power of attorney for the patent application executed by Smith, and file the documents with the PTO accompanied by the appropriate fees.
- (C) Request that Wesson obtain an assignment or license of the Smith invention and thereafter prepare a patent application on the Smith invention and file the same in the PTO in the name of Smith as sole inventor.
- (D) Negotiate with Mr. Smith to license his invention to Wesson, draft the license agreement and have same executed by Smith and Wesson, and record the original executed assignment with the assignment branch of the PTO.
- (E) Advise Wesson that it may use the Smith invention in its business because the circumstances giving rise to the invention give it a "shop right."

48. Jack loved to tinker with electrical gadgets in his youth, but adulthood and the responsibilities of a job and a family forced him to spend his time with other pursuits. Retirement, however, opened the door to renew his passion for tinkering, and soon he began to spend so much time at his pastime that he developed a reputation as an eccentric among his friends and neighbors. One day, while Jack was tinkering in his homemade shop and his wife, Jill, was entertaining relatives, Bruce, a visiting relative and a registered patent attorney, wandered into Jack's shop, and soon became entranced with one of the gadgets that Jack had invented. Bruce informed Jack that his invention appeared to be patentable and that he, Bruce, would be delighted to obtain patent protection for Jack for no more than the expenses involved, and that he, Bruce, could probably arrange to market the invention for little more than the effort involved in making a few phone calls. After very little persuasion, Jack retained Bruce to patent the invention, insisting, however, that he be permitted to review the final draft of the application, that he be consulted at every step of the prosecution, and that no prosecution decision be made without his concurrence. Bruce agreed, and thereupon prepared and filed a patent application naming Jack as sole inventor. Subsequently, Bruce succeeded in negotiating the sale of Jack's entire interest in the invention to the Star Financial Group, which in turn conveyed an exclusive license in the invention to the Omega Electrical Corporation. Both the assignment to Star and the license to Omega were properly executed and recorded in the PTO. According to proper PTO practice and procedure, which of the following statements is true?

- (A) Omega may intervene in the prosecution of Jack's patent application and appoint a patent attorney other than Bruce without Jack's consent.
- (B) Omega may intervene in the prosecution of Jack's patent application and appoint a patent attorney other than Bruce, and specifically request that Jack be excluded from access to his patent application file.
- (C) Star may intervene in the prosecution of Jack's patent application and appoint a patent attorney other than Bruce, and specifically request that Jack be excluded from access to his patent application file.
- (D) Omega may intervene in the prosecution of Jack's patent application and appoint a patent attorney other than Bruce, and specifically request that Jack be excluded from access to his patent application file, but Jack may be permitted to inspect the file on sufficient showing why the inspection is necessary to conserve his rights.
- (E) Star may intervene in the prosecution of Jack's patent application and appoint a patent attorney other than Bruce, and specifically request that Omega be excluded from access to his patent application file.

49. An international application under the Patent Cooperation Treaty (PCT), which designated the United States, was filed on January 3, 1995. The application claimed priority of a prior French national application filed on February 7, 1994. A copy of the international application was communicated to the United States as a designated office on August 19, 1995. A demand for international preliminary examination, in which the United States was elected, was filed on September 5, 1995. Accordingly, the thirty month period of PCT Article 39(1)(a) expired at midnight on August 7, 1996. The applicant submitted the basic national fee to enter the United States national stage on August 2, 1996. On October 2, 1996, the applicant timely submitted a translation of the international application and a declaration of the inventors in compliance with PCT regulations in response to a Notice of Missing Requirements. Also, on October 8, 1996, the applicant timely submitted a translation of amendments under Article 19 of the PCT in response to the Notice of Missing Requirements. On October 30, 1996, a Notice of Acceptance was mailed to the applicant. The national stage application issued as a U.S. patent on December 6, 1997. What is the effective date of the U.S. patent as a reference under 35 U.S.C. 102(e)?

- (A) January 3, 1995
- (B) August 7, 1996
- (C) October 2, 1996
- (D) October 8, 1996
- (E) December 6, 1997

50. Which of the following is not a requirement of 35 U.S.C. § 102(d) to bar the granting of a patent in this country?

- (A) The foreign application must have been filed more than 12 months before the effective filing of the application in the United States.
- (B) The foreign application must have been filed by the same applicant as in the United States or by his or her legal representatives or assigns.
- (C) The foreign patent or inventor's certificate must be actually granted before the U.S. filing date.
- (D) The foreign patent or inventor's certificate must have been published prior to the date of the application for patent in the United States.
- (E) The same invention must be involved.

**U. S. DEPARTMENT OF COMMERCE
UNITED STATES PATENT AND TRADEMARK OFFICE
REGISTRATION EXAMINATION
FOR PATENT ATTORNEYS AND AGENTS**

AUGUST 26, 1998

Afternoon Section (100 Points)

Time: 3 Hours

DIRECTIONS

This section of the examination is an open book examination. You may use books, notes, or other written materials that you believe will be of help to you *except* you may not use prior registration examination questions and/or answers. Books, notes or other written materials containing prior registration examination questions and/or answers *cannot* be brought into or used in the room where this examination is being administered. If you have such materials, you must give them to the test administrator before this section of the examination begins.

All questions must be answered in SECTION 1 of the Answer Sheet which is provided to you by the test administrator. You must use a No. 2 (or softer) lead pencil to record your answers on the Answer Sheet. Darken *completely* the circle corresponding to your answer. You must keep your mark within the circle. Erase *completely* all marks except your answer. Stray marks may be counted as answers. No points will be awarded for incorrect answers or unanswered questions. Questions answered by darkening more than one circle will be considered as being incorrectly answered.

This section of the examination consists of fifty (50) multiple choice questions, each worth two (2) points. Do not assume any additional facts not presented in the questions. When answering each question, unless otherwise stated, assume that you are a registered patent practitioner. Any reference to a practitioner is a reference to a registered patent practitioner. The most correct answer is the policy, practice, and procedure which must, shall, or should be followed in accordance with the U.S. patent statutes, the PTO rules of practice and procedure, the Manual of Patent Examining Procedure (MPEP), and the Patent Cooperation Treaty (PCT) articles and rules, unless modified by a subsequent court decision or a notice in the *Official Gazette*. There is only one most correct answer for each question. Where choices (A) through (D) are correct and choice (E) is "All of the above," the last choice (E) will be the most correct answer and the only answer which will be accepted. Where two or more choices are correct, the most correct answer is the answer which refers to each and every one of the correct choices. Where a question includes a statement with one or more blanks or ends with a colon, select the answer from the choices given to complete the statement which would make the statement *true*. Unless otherwise explicitly stated, all references to patents or applications are to be understood as being U.S. patents or regular (non-provisional) utility applications for utility inventions only, as opposed to plant or design applications for plant and design inventions. Where the terms "USPTO," "PTO," or "Office" are used in this examination, they mean the U.S. Patent and Trademark Office.

You may write anywhere on this examination booklet. However, do not remove any pages from the booklet. Only answers recorded in SECTION 1 of your Answer Sheet will be graded. YOU MUST SCORE AT LEAST 70 POINTS TO PASS THIS SECTION OF THE REGISTRATION EXAMINATION.

DO NOT TURN THIS PAGE UNTIL YOU ARE INSTRUCTED TO

1. Dr. John Doe, an electrical engineer, was employed by the General Automotive Company, (GAC), to do research on ignition distribution systems for internal combustion engines. In the course of such research, Dr. Doe took a number of samples of rigid metallic manifold casings, and filled them with a variety of yieldable, non-moldable unitary solids having various dielectric properties. After testing many materials including the reaction products of polymerized walnut-shell oil and formaldehyde, and comparing their radio shielding properties, none of which worked, Dr. Doe concentrated his research on what theoretically appeared to be the most promising materials, specifically, the reaction products of polymerized nut-shell oil and formaldehyde. Included in Dr. Doe's subsequent tests were the polymerized oils from the shells of walnuts, peanuts, chestnuts, almonds, and cashews only. In the case of the cashews, Dr. Doe discovered that the dielectric property of the resulting reaction products were such that when utilized in harnesses designed for ignition distribution systems of internal combustion engines the radio shielding property proved outstanding. As patent counsel for GAC, you prepared and filed in the PTO a patent application disclosing the results of Dr. Doe's research including his test data. The application as filed includes a single claim which begins with the following language:

A radio-shielding harness for the ignition distribution system of an internal combustion engine, comprising a rigid metallic manifold casing for enclosing and shielding a plurality of ignition conductors, and

Which of the following phrases, each of which is described by the specification, when added to the end of the recited claim language is least likely to be rejected under 35 U.S.C. § 112?

- (A) a solid yieldable dielectric material consisting of polymerized nutshell oil substantially filling said casing around said conductors, said material being in a non-moldable state and capable of holding said conductors against movement relative to each other and to the casing.
- (B) a solid yieldable dielectric material consisting of the reaction products of polymerized nut-shell oil and formaldehyde substantially filling said casing around said conductors, said oil selected from the group comprising shells of walnuts, peanuts, chestnuts, almonds, and cashews, and said material being in a non-moldable state and capable of holding said conductors against movement relative to each other and to the casing.
- (C) a solid yieldable dielectric material consisting of the reaction products of polymerized nut-shell oil and formaldehyde substantially filling said casing around said conductors, said oil selected from the group consisting of shells of walnuts, peanuts, chestnuts, almonds, and cashews, and said material being in a non-moldable state and capable of holding said conductors against movement relative to each other and to the casing.
- (D) a solid yieldable dielectric material consisting of the reaction products of polymerized cashew-shell oil and formaldehyde substantially filling said casing around said conductors, said material being in a non-moldable state and capable of holding said conductors against movement relative to each other and to the casing.

- (E) a solid yieldable dielectric material selected from the group comprising the reaction products of polymerized chestnut-shell oil and formaldehyde substantially filling said casing around said conductors, said material being in a non-moldable state and capable of holding said conductors against movement relative to each other and to the casing.

2. Your client has invented a miniature vacuum tube comprising a capacitor having a capacitance of 0.003 to 0.012 μf , preferably 0.006 μf . You draft a patent application directed to your client's invention and satisfying the requirements of 35 U.S.C. § 112. You draft the following independent claim:

1. A miniature vacuum tube comprising a capacitor having a capacitance of 0.003 to 0.012 μf .

Which of the following would not be a proper dependent claim if presented as an original claim in the application when the application is filed in the PTO?

- (A) 2. The miniature vacuum tube of Claim 1 wherein the capacitor has a capacitance of 0.006 μf .
- (B) 2. A miniature vacuum tube as in Claim 1 wherein the capacitor has a capacitance of 0.006 to 0.012 μf .
- (C) 2. A miniature vacuum tube as in Claim 1 wherein the capacitor has a capacitance of about 0.003 to 0.011 μf .
- (D) 2. The miniature vacuum tube of Claim 1 wherein the capacitor has a capacitance of between 0.005 and 0.012 μf .
- (E) (C) and (D)

3. Assuming that each of the following claims is in a different utility patent application, and each claim is fully supported by the disclosure in preceding claims or in the application in which the claim appears, which of the claims properly presents a process claim?

- (A) A process of utilizing a filter comprising electrical components, placing a plurality of electrodes on the human body, receiving electrical signals from the electrodes and passing the signal through the filter which comprises electrical components.
- (B) A process of polymerizing an organic compound by combining a catalyst and reactants in a reaction vessel, heating the mixture in the vessel to a high temperature to start the reaction, separating the organic layer from the remaining materials and evaporating the solvent.
- (C) The use of a water repellant paint as a sealant for wooden patio furniture.
- (D) (A) and (B).
- (E) (A), (B), and (C).

4. Star Chemical Corporation retains you to obtain patent protection for their invention relating to improved production of ethylene oxide. You prepare and file a patent application in the PTO having a specification satisfying the requirements of 35 U.S.C. § 112 and the following two claims, which are fully supported by the specification:

1. A process for preparing a silver-supported catalyst for the improved production of ethylene oxide, said process comprising the steps of:

- (a) forming an aqueous solution of silver salt;
- (b) immersing completely in said solution a carrier of inert, porous particles, characterized by an average diameter not larger than 3/16 inch, an average pore diameter of 10 to 70 microns, and a surface area less than one square meter per gram;
- (c) impregnating said particles with said solution;
- (d) separating the impregnated particles from the remainder of said solution;
- (e) drying the separated particles, whereby said silver salt is deposited uniformly throughout the pores of said particles; and
- (f) activating the dried particles by heating them in air at a temperature sufficient to decompose the deposited silver salt.

2. An oxygen-activated catalyst for use in the controlled catalytic oxidation of ethylene to ethylene oxide, said catalyst comprising 5 to 25% by weight of silver, said silver being the thermal decomposition product of a pore solution-deposited silver salt uniformly distributed throughout the pores of inert, porous particles.

Claim 1 is rejected in the first Office Action under 35 U.S.C. § 103 as unpatentable over Able in view of Baker. Claim 2 is rejected under 35 U.S.C. § 103 as unpatentable over Baker. Able discloses a process for producing a catalyst for oxidation of ethylene to ethylene oxide by impregnating a porous carrier with a solution of a silver salt of an organic acid, separating the excess liquid, drying the impregnated carrier, and decomposing the silver salt by direct heat in an inert gas. Baker discloses a method of making an oxygen activated catalyst by coating a carrier with a silver catalyst using a paste or slurry. The silver compound paste is coated on the support, dried and then activated by treating the catalyst in large trays for several hours in a forced draft hot air oven at about 400°C. Baker discloses the physical characteristics of the oxygen-activated catalyst. The physical characteristics of the claimed catalyst are indistinguishable from Baker's catalyst.

Which of the following represents the best course of action to overcome the rejection and obtain a Notice of Allowance in the application?

- (A) Cancel Claim 1 and argue that the inventive catalyst has both high selectivity, i.e., a measure of the ability of a catalyst to prefer the partial oxidation reaction of ethylene over the total oxidation reaction of ethylene to carbon dioxide, and high productivity, i.e., a measure of the amount of ethylene oxide produced per unit of catalyst and per unit of time.
- (B) Cancel Claim 2 and argue that the combination of references is improper because it would not have been obvious to one of ordinary skill in the art to substitute the activation step of Baker for the activation step of Able.
- (C) Amend Claim 1 to recite that an oxidizing agent is added to the solution to prevent premature reduction of the silver salt.
- (D) Cancel Claim 1 and amend Claim 2 to recite that the inert, porous particles contain silica-alumina, and argue that such recitation is not disclosed by the references.
- (E) Cancel Claim 1 and argue that the combination of references is improper because it would not have been obvious to one of ordinary skill in the art to substitute the activation step of Baker for the activation step of Able.

5. X invented a laminate containing a transparent protective layer and a light-sensitive layer, without an intermediate layer. The prior art included a laminate containing a transparent protective layer and a light-sensitive layer held together by an intermediate adhesive layer. Which of the following is a proper claim that would overcome a 35 USC § 102 rejection based on the prior art?

- (A) 1. A laminate comprising a transparent protective layer and a light-sensitive layer.
- (B) 1. A laminate comprising a transparent protective layer and a light-sensitive layer which is in continuous and direct contact with the transparent protective layer.
- (C) 1. A laminate comprising a transparent protective layer and a light-sensitive layer, but not including an adhesive layer.
- (D) (A) and (B).
- (E) (B) and (C).

6. Egghead filed a patent application on subject matter pertaining to a method of producing a completely hardened metal structural element, such as a roller bearing race. The invention is directed to separating one bearing race from another in the production process. The specification discloses that the method consists essentially of the steps of (1) subjecting the surface of the element along an intended course of fracture to direct high energy radiation, such as a laser beam, to selectively embrittle the metal, and (2) then splitting the element along the intended course of fracture, e.g., by a chilling process, such as quenching, or putting the surface subjected to radiation under tensile stress by applying a force to the structural element to generate the fracture, thereby forming separate bearing races. The specification does not include a definition of the language "completely hardened metal structural element," and notes that the surface of the structural element may be provided with a groove along at least a portion of the intended course of the fracture, but that the groove is not provided to influence the course of the fracture, and hence, in contrast to known methods, it is unnecessary to form the groove as a sharp-edged notch.

In the course of prosecution, the examiner issued an Office Action rejecting claims 6 and 10, the remaining claims in the case, as anticipated by Highbrow under 35 U.S.C. § 102(b). The Highbrow patent teaches a method of producing a metal structural element by irradiating the surface of such element with high energy radiation along an intended course of fracture which has been provided with a sharp-edged notch, and then splitting the element along the intended course of fracture by quenching.

The claims are as follows:

6. A method of fracturing a completely hardened metal structural element, said method consisting essentially of subjecting the surface of the completely hardened structural element at least along a portion of an intended course of fracture and in transverse limitation thereto to a high energy radiation to selectively embrittle the metal, and then splitting the element along the intended course of fracture by a chilling process.

10. The method of Claim 6 comprising providing the surface of the completely hardened metal structural element along at least a portion of the intended course of fracture with a groove, and subjecting said element to said high energy radiation.

Which of the following actions should Egghead take that accords with proper PTO practice and procedure and stands the best chance of overcoming the examiner's rejection?

- (A) Traverse the rejection and argue that Highbrow does not teach the application of "direct" high energy radiation as taught by Egghead.
- (B) Traverse the rejection and argue that the language "consisting essentially of" recited in Claim 6 excludes the "notching" step taught by Highbrow.

- (C) Amend Claim 6 by deleting the language "by a chilling process" at the end of the claim and traverse the rejection by arguing that Claim 6 no longer reads on Highbrow's "quenching" step.
- (D) Traverse the rejection and argue that the language "a completely hardened metal structural element" recited in Claim 6 would be interpreted by one of ordinary skill in the art as defining a metal element which is completely crystalline throughout its structure and that the metal element disclosed by Highbrow does not possess this crystalline structure.
- (E) Amend Claim 6 by deleting the language "a chilling process" of the claim and, after "fracture by" in line 5, inserting the language "putting the surface subjected to radiation under tensile stress by applying a force to the structural element to generate the fracture." Traverse the rejection on the ground that Highbrow does not teach this step and that his quenching step is not equivalent thereto.

7. Inventor Jones received a patent that, through error and without deceptive intent, failed to describe an embodiment of her invention. Eighteen months after the patent was issued, you filed a complete reissue application adding a claim directed to the omitted embodiment, together with Jones' declaration explaining the error, and the other required papers. In accordance with PTO practice and procedure,

- (A) The claim is subject to a rejection under 35 U.S.C. § 132.
- (B) The specification is subject to an objection as failing to provide proper antecedent basis for the claimed subject matter and require correction.
- (C) The claim is subject to a rejection under 35 U.S.C. § 251 and a rejection under 35 U.S.C. § 112, first paragraph.
- (D) The claim is allowable.
- (E) (B) and (D).

8. A patent application describes an improved cat litter tray, preferably rectangular in shape, and includes drawings depicting such a tray having a major axis and a minor axis and adapted to hold a layer of cat litter. The specification describes and the drawings depict a removable igloo-like cover mated with at least two sides of the tray in a friction fit manner and containing an opening at each end of the cover parallel to the minor axis of the tray adapted for ingress and egress of a cat. The essential feature described in the specification and depicted in the drawings resided in a screen, pivotally affixed to opposing sides of the tray parallel to the major axis of the tray at points above the cat litter. In operation, as described in the specification, a cat would enter the device through one of the openings in the igloo-like cover stepping upon the screen, preferably wire mesh. The weight of the cat would cause the screen to pivot downward until it contacted the layer of cat litter. Following urination, the cat would egress from the device through a cover opening, the urine having passed through the wire mesh screen to be absorbed by the cat litter, and the cat having egressed without carrying any litter to be tracked into the surrounding area. During the day, ingress and egress from the opposing cover openings would result in the pivotally affixed wire mesh screen being subjected to a see-saw action, essential to break up and disintegrate dried fecal matter, thus permitting the matter to pass through the screen to the litter below. Reference numerals assigned to the elements and shown in the drawings were as follows: tray 10, screen 15, cover 20

Which of the following claim phrases accord(s) with PTO practice and procedure regarding the form of claims?

- (A) An improved cat litter tray comprising a tray 10, a screen 15, a cover 20
- (B) An improved cat litter tray comprising a tray (10), a screen (15), a cover (20)
- (C) An improved cat litter tray comprising a tray, a screen, a cover,
- (D) A and B
- (E) B and C

9. In the course of prosecuting a patent application before the PTO, you receive a non-final Office action allowing Claim 1, and rejecting Claims 2 through 6, the remaining claims in the case.

Claim 1 reads as follows:

1. A ship propeller exhibiting excellent corrosion resistance, said ship propeller consisting essentially of a copper base alloy consisting of 2 to 10 percent tin, 0.1 to 0.9 percent zinc, and copper.

The specification of the application teaches that the copper base alloy made with the addition of 2 to 10 percent aluminum increases the alloy's wear resistance without detracting from its corrosion resistance. However, adding aluminum to the surface of the propeller does not increase wear resistance. Which of the following claims, if any, if added by amendment would accord with proper PTO practice and procedure?

- (A) 7. A copper base alloy according to Claim 1 wherein said alloy includes 2 to 10 percent aluminum.
- (B) 7. A ship propeller according to Claim 1 including the step of adding 2 to 10 percent aluminum to the copper base alloy.
- (C) 7. A ship propeller according to Claim 1 including 2 to 10 percent aluminum.
- (D) 7. A ship propeller according to Claim 1 wherein said alloy includes 2 to 10 percent aluminum.
- (E) None of the above.

10. Applicant claims the following container lid combination:

1. A dispensing top for passing only several candy pieces at a time from an open ended container filled with candy, having a generally conical shape and an opening at each end, the opening at the reduced end allows several pieces of candy to pass through at the same time, and means at the enlarged end of the top embrace the open end of the container, the taper of the top being such that only a few pieces of candy are dispensed when the top is mounted on the container and the container is turned over.

The prior art reference X teaches a conically shaped funnel that can be secured on top of a can containing motor oil, such that the contents are dispensed when the can is turned on its side. X also mentions that it can be used for solid materials. The claim was rejected as anticipated by X under 35 U.S.C. § 102. Which of the following replies to the rejection would be most likely to result in issuance of Claim 1?

- (A) Traversing the rejection on the ground that X is nonanalogous art, and therefore cannot be used for anticipation purposes against Claim 1.
- (B) Traversing the rejection on the ground that X does not specifically teach dispensing of candy pieces like Claim 1.
- (C) Amending Claim 1 to add specific limitations to the dimensions of the dispensing top.
- (D) All of the above.
- (E) None of the above.

11. While researching heart disease, Dr. Able developed a process for preparing compounds which exert "strongly saluretic [sodium expelling] and diuretic [water expelling] effects." Dr. Able found that these compounds were useful also in the treatment of heart conditions and hypertension. Dr. Able's compounds are substituted dihydrobenzothiadiazines having an "R" group at position 3 of the benzothiadiazine nucleus wherein R is selected from the group consisting of phenyl, benzyl, and phenethyl. You prepare a patent application on Dr. Able's invention and file the application in the PTO on August 5, 1996. The sole original claim is as follows:

A substituted dihydrobenzothiadiazine compound wherein the only variable is an "R" group at position 3 of the benzothiadiazine nucleus, said "R" group being selected from the group consisting of phenyl, benzyl, and phenethyl, and said compound exerting strong saluretic and diuretic effects and being useful in the treatment of heart conditions and hypertension.

In the first Office action, the claim is rejected under 35 U.S.C. § 102(e) as unpatentable over the Baker patent, which issued June 25, 1998 on an application filed May 13, 1996. The Baker specification states that it is "a continuation-in-part application of my application Serial No. 123,456, filed September 29, 1995 (now abandoned)." The Baker patent relates to processes for preparing compounds having a generic formula which includes within its scope substituted dihydrobenzothiadiazine compounds, and a list of appropriate substituents disclosed by the Baker patent includes the compounds of Dr. Able's claim. One of the processes disclosed by Baker in the patent and in application '456 for preparing the compounds is identical to Dr. Able's process in all material respects. The '456 application discloses several closely related processes for preparing compounds having a generic formula identical to that disclosed in the issued patent. But the '456 application contained an even broader disclosure. Comparison of the generic disclosure and the nature of the substituents on the benzothiadiazine nucleus as disclosed in the Baker patent and the '456 application reveals that they both disclose the "R" group as including hydrogen, trifluoromethyl, benzyl, or phenethyl. In rejecting Dr. Able's claim, the examiner placed emphasis on Example 2 of the '456 application, particularly, the last paragraph, which stated that other reagents may be used in the preparation process employed in Example 2, and identified specific reagents, which if used would result in each of the compounds of Dr. Able's claim, i.e., compounds wherein the "R" group was phenyl, benzyl, or phenethyl. In reply to the Office action, you file an amendment limiting the variable of Dr. Able's claim to one of the following "R" groups. Which one is most likely to overcome the rejection?

- (A) phenyl
- (B) benzyl
- (C) phenethyl
- (D) trifluoromethyl
- (E) None of the above

12. Jones, a graduate student at ABC University, while engaged in a research project funded by a grant from a Fortune 500 company, conceived an invention for creating a smooth waveform display in a digital oscilloscope. After building and successfully testing the invention, Jones, pursuant to the grant instrument, assigned the invention rights to the Fortune 500 company. As patent counsel for the company, you prepared and filed a patent application directed to the invention. The application contains the following claim which is the sole claim in the application:

A rasterizer for converting vector list data representing sample magnitudes of an input waveform into anti-aliased pixel illumination intensity data to be displayed on a display means comprising:

- (a) means for determining the vertical distance between the endpoints of each of the vectors in the data list;
- (b) means for determining the elevation of a row of pixels spanned by the vector;
- (c) means for normalizing the vertical distance and elevation; and
- (d) means for outputting illumination intensity data as a predetermined function of the normalized vertical distance and elevation.

The specification in the application describes specific structure corresponding to each of the means for performing a specified function recited in the claim.

Which of the following statements best characterizes the claim?

- (A) The claim reads on a digital computer means to perform the various steps under program control. Thus, it is proper to treat the claim as if it is drawn to a method.
- (B) The claim as a whole is directed to a mathematical algorithm.
- (C) The claim is directed to nonstatutory subject matter because during examination the means clauses are given their broadest interpretation and limitations in the specification are not imputed into the claim.
- (D) The claim as a whole is directed to a machine.
- (E) The claim is directed to nonstatutory subject matter because it is written completely using means clauses which are read broadly in the PTO to encompass each and every means for performing the recited functions. Thus, the claim is a process claim wherein each means clause represents a step reciting a mathematical operation, which steps combine to form a mathematical algorithm for computing pixel information. When the claim is viewed without the steps of this mathematical algorithm, no other elements or steps are found.

13. A's patent specification discloses a personal computer comprising a microprocessor and a random access memory. There is no disclosure on the specification of a minimum amount of storage for the random access memory. In the preferred embodiment the microprocessor has a clock speed of 100-200 megahertz. The application originally included the following Claims 11 and 12 (among others), and Claim 13 was added by amendment after an office action:

11. A personal computer comprising a microprocessor and a random access memory including at least ½ gigabyte of storage.

12. The personal computer of Claim 11, in which the microprocessor has a clock speed of 170-200 megahertz.

13. The personal computer of Claim 12, in which the random access memory is greater than 1 gigabyte of storage.

Which of the following statements is or are true about the claims with respect to 35 U.S.C. § 112, fourth paragraph?

- (A) Claim 11 is a proper independent claim.
- (B) Claim 12 is a proper dependent claim.
- (C) Claim 13 is a proper dependent claim.
- (D) Claim 13 is an improper dependent claim.
- (E) (A), (B), and (C).

14. X received a patent on a satellite communications system, and has engaged you to advise her on seeking reissue with the following amended Claim 1:

1. A low orbit satellite communications system [for mobile terminals], wherein the communications antenna system of each satellite provides isoflux coverage made up of a plurality of [elongated] fan beams that are elongated in the travel direction of the satellite.

The amended claim is supported by the original disclosure in X's patent. X is concerned about the applicability of reference A. During the original prosecution, the examiner rejected original Claim 1 as anticipated by A, but then the examiner changed her mind and allowed original Claim 1 over A. X is concerned that infringers of the patent will contend, as a defense to patent infringement, that original Claim 1 is in fact anticipated by A. X is also concerned that amended Claim 1, above, also is arguably anticipated by A.

Which of the following statements is (are) true?

- (A) X may properly present amended Claim 1 in a reissue application filed at any time during the patent term.
- (B) As long as X files her reissue application within two years of the issuance of X's patent, X may properly present amended Claim 1 at any time during the prosecution of the reissue application or any continued prosecution applications arising from the reissue application, and no intent to broaden the claims was indicated in the oath or declaration within the two year period.
- (C) As long as X files her reissue application within two years of the issuance of X's patent, X may properly present amended Claim 1 at any time during the prosecution of the reissue application, but X may not properly present amended Claim 1 for the first time in a continued prosecution application arising from the reissue application unless X also filed that application within two years of the issuance of X's patent, and no intent to broaden the claims was indicated in the oath or declaration within the two year period.
- (D) Since the examiner considered reference A during the original prosecution of X's patent, but then allowed Claim 1, the examiner cannot apply reference A during the reissue proceeding to reject any claim that is narrower than original Claim 1.
- (E) None of the above.

15. You have filed a complete plant patent application claiming a distinct and new plant variety, and claiming a method for obtaining the plant variety. Which, if any, of the following statements are false?

- (A) You may not amend the application to add additional description of the plant variety not contained in the original application, even if consistent and related to the original description and photograph of the plant.
- (B) The examiner may properly require you to deposit an adequate sample of the plant variety with an acceptable depository, and reject the claims under 35 U.S.C. § 112 pending the deposit.
- (C) The examiner may properly require you to elect which of the claims you want examined for ultimate issuance as the single claim to which you are entitled.
- (D) All of the above.
- (E) None of the above.

16. An original claim in a patent application to a mechanical arts invention recites the limitation of "a screw" which is shown in an original application drawing. However, "a screw" does not appear in the original written description part of the application. Which of the following is correct?

- (A) The written description may not be properly amended to include "a screw."
- (B) The claim is indefinite with respect to "a screw."
- (C) The application lacks an enabling disclosure as to "a screw."
- (D) The claim is definite with respect to "a screw."
- (E) The application fails to set forth the best mode for "a screw."

17. For a certain chemical composition, the original written description sets forth a range of "35% - 80%" and specific examples of "40%" and "65%." A corresponding claim includes the limitation, added by amendment, of "at least 42%." There is no other range or specific example disclosed in the application. Which of the following is correct?

- (A) The claim limitation is indefinite.
- (B) The claim limitation is not supported by the written description.
- (C) The disclosure is enabling with respect to the claim limitation.
- (D) The claim limitation is within the scope of "35%- 80%" in the written description.
- (E) The inventor has concealed the best mode.

18. The claims of an application limit a scanning device as having a specific angular view. A patent issues. One year after the patent issued, the patentee filed a reissue application with all required papers. As filed, the claims in the reissue application are amended to remove the limitations directed to the specific angular view. Which of the following is correct?

- (A) The patentee may not broaden his claims through reissue by removing the limitations directed to the specific angular view.
- (B) Since the patentee is removing a limitation, the claim is being narrowed.
- (C) The patent may not be modified after issuance.
- (D) The patentee may broaden claims through reissue by removing the limitation directed to the specific angular view.
- (E) The Patent and Trademark Office may not allow broader claims during reissue.

19. A claim limitation reads "a pH range between 7 and 12, preferably between 9 and 10." Which of the following is correct?

- (A) Since the limitation properly sets forth outer limits, it is definite.
- (B) As long as the limitation is supported in the written description, it is proper.
- (C) The limitation is indefinite.
- (D) Since the limitation sets forth a preferred range, it is definite.

- (E) An applicant is precluded from expanding the claim coverage beyond a pH range of 7-12 under the doctrine of equivalents.

20. With regard to an art or technology that is considered to be unpredictable, which of the following is correct?

- (A) A patent cannot issue because the art is unpredictable.
(B) Claims in an application need more detail than usual in order to be definite.
(C) An applicant has an option as to which mode of the invention to set forth.
(D) An applicant must pay a higher filing fee.
(E) A written description needs more detail as to how to make and use the invention in order to be enabling.

21. Which of the following claim phrases may be used in accordance with proper PTO practice and procedure?

- (A) R is selected from the group consisting of A, B, C, or D.
(B) R is selected from the group consisting of A, B, C, and D.
(C) R is selected from the group comprising A, B, C, and D.
(D) R is selected from the group comprising A, B, C, or D.
(E) R is A, B, C, and D.

22. Which of the following claims is (are) not in proper format?

- (A) A device for cooking small pieces of food comprising a basket including a mesh made of a material suitable for cooking small pieces of food, said mesh comprising a bottom, a rear wall, a front wall, and two side walls, wherein the two side walls are joined to the front and rear walls and the rear wall is higher than the front wall such that the entire device fits completely within conventional covered outdoor barbecue grills and such that the higher rear wall facilitates turning over the small pieces of food when the device is shaken.
(B) A mesh basket for cooking food comprising a bottom, a rear wall, a front wall, and two side walls, wherein the side walls are joined to the front and rear walls and the rear wall is higher than the front wall such that the entire basket fits completely within conventional covered outdoor barbecue grills.
(C) A device for grilling small pieces of food comprising a bottom, a rear wall, a front wall, and two side walls, wherein the two side walls are joined to the front and rear walls and the rear wall is higher than the front wall, and wherein the walls are made of a mesh material suitable for cooking or grilling small pieces of food.
(D) (A) and (B).
(E) None of the above.

23. Which of the following statements is (are) true?

- (A) A claim may not be dependent on any claim which is itself a dependent claim.
- (B) A dependent claim may not contain means-plus-function limitations.
- (C) A dependent claim will always be infringed by any device that would also infringe the base claim from which it depends.
- (D) Any dependent claim may be re-drafted as an independent claim.
- (E) All of the above statements are true.

24. Which of the following is not a PTO recommendation or requirement?

- (A) Claims should be arranged in order of scope so that the first claim presented is the least restrictive.
- (B) Product and process claims should be separately grouped.
- (C) Every application should contain no more than three dependent claims.
- (D) A claim which depends from a dependent claim should not be separated from that dependent claim by any claim which does not also depend from the dependent claim.
- (E) Each claim should start with a capital letter and end with a period.

25. Which of the following is false?

- (A) The meaning of terms in a claim should be ascertainable by reference to the description in the specification.
- (B) While a term used in a claim may be given a special meaning in the description, no term may be given a meaning repugnant to the usual meaning of the term.
- (C) Trademarks may be used in claims only if each letter in the trademark is capitalized.
- (D) Claims may not contain tables or chemical or mathematical formulas.
- (E) Figures may be incorporated by reference in the claims.

26. The claim below is incomplete because it is missing limitation (iii).

A seating device comprising:

- (i) a base member having four parallel edges, and opposing first and second sides;
- (ii) a back member connected to one of the edges of the base member forming a right angle with said first side;
- (iii) _____

(iv) a pair of arm members connected to said back member and said first and second leg members, wherein said arm members are capable of supporting the arms of a person sitting in the seating device.

Of the following choices, which would be the best to complete the claim by providing the missing limitation (iii)?

- (A) a set of leg members connected to the second side of said base member;
- (B) a first pair of leg members connected to the second side of said base member at the same edge as the back member, and a second pair of leg members connected to the opposite edge of said support member;
- (C) first, second, third, and fourth leg members connected to said underside of said base member;
- (D) first, second, third, and fourth leg members connected to said second side of said base member, each edge having a leg member adjacent to said edge, wherein said leg members are parallel to each other;
- (E) first, second, third, and fourth leg members connected to said corners of said second side of said base member;

27. Applicant filed a patent application claiming a polyester. The application discloses that the claimed polyester having structural formula R-R' is used to form a stain resistant fabric. The examiner properly rejected the claims as unpatentable over prior art disclosing the claimed polyester having structural formula R-R' and its use to form various fabrics. Given the fact that applicant's specification discloses that the polyester may be produced by a process comprising steps A, B, C, and D, and such process is novel and unobvious, which of the following claims, if introduced by amendment, would overcome the rejection?

- (A) A polyester having structural formula R-R' used to form a stain resistant fabric, the polyester being produced by the process comprising the steps A, B, C, and D.
- (B) A polyester-producing process comprising steps A, B, C, and D, said process resulting in a polyester having structural formula R-R' capable of forming a stain resistant fabric.
- (C) A polyester produced by the process comprising the steps A, B, C, and D.
- (D) A polyester comprising the resultant product of steps A, B, C, and D.
- (E) A polyester produced by the process comprising the steps A, B, C, and D, said polyester used to form a stain resistant fabric and having structural formula R-R'.

The following two questions are related:

28. Your client comes to you with a new ornamental design for a bowling pin. Which of the following would be proper claim language for your client's design?

- (A) "The ornamental design for a bowling pin."
- (B) "The ornamental design for a bowling pin as shown and described."
- (C) "The ornamental design for sports equipment as shown."
- (D) "A unique configuration and surface ornamentation for a bowling pin."
- (E) None of the above because bowling pins are functional and not ornamental.

29. Your client's bowling pin includes both a unique functional structure and unique surface ornamentation. You decide that it would be beneficial to protect the unique structure and the unique surface ornamentation separate and apart from one another. Which of the following would be an appropriate action for separately protecting the unique functional structure of the bowling pin?

- (A) Draft a dependent claim covering the unique functional structure and file it in the same design application as the claim covering the entire design of the bowling pin.
- (B) File a separate utility application claiming only the unique functional structure of the bowling pin.
- (C) File a separate design application claiming only the unique surface ornamentation of the bowling pin.
- (D) File a separate utility application claiming a unique method for making a wooden bowling pin having the unique functional structure.
- (E) None of the above.

30. Which of the following requirements of 35 U.S.C. § 112 do NOT apply to design patent claims?

- (A) The written description requirement of the first paragraph.
- (B) The best mode requirement of the first paragraph.
- (C) The requirement in the second paragraph to distinctly claim the subject matter which the applicant regards as his invention.
- (D) The requirement in the third paragraph for an independent claim.
- (E) None of the above.

31. Which of the following is not required in a provisional application?

- (A) The written description of the invention.
- (B) The best mode contemplated by the inventor for carrying out his or her invention.
- (C) One or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- (D) The manner and process of making and using the invention.
- (E) None of the above.

32. Applicant's patent application is directed to a light sensitive dental reconstruction compound comprising a polymer and non-reactive metal blend having a set point activated by ultraviolet light. The polymer is made from at least 60% by weight monomer X, and at least 0.1% by weight monomer Y. 74%, 79%, and 85% are exemplary weight percentages of monomer X, with the respective weight percentage balances of the polymer being monomer Y. Set point is defined as the phase change when the amorphous polymer transforms to a hard, rigid, enamel-like state from a soft, flexible, rubbery state. The set point is directly related to the types of monomer selected and monomer proportions selected. A prior art reference properly cited against the application discloses a dental reconstruction compound comprised of polymer and non-reactive metal blends made from the same monomers, and the same proportions as that disclosed by applicant. The prior art reference does not disclose the method of inducing a set point by exposing the compound to ultra-violet light. The reference compositions are disclosed as being used in veterinary dentistry. Which of the following claims, if any, is (are) patentable over the reference?

- (A) A light sensitive dental reconstruction compound comprising a polymer and non-reactive metal blend, said polymer comprising at least 60% by weight monomer X, and at least 0.1% by weight monomer Y, wherein a set point is induced using ultra-violet light.
- (B) A light sensitive dental reconstruction compound comprising a polymer and non-reactive metal blend, said polymer comprising 74% by weight monomer X, and the balance monomer Y, wherein a set point is induced using ultra-violet light.
- (C) A dental reconstruction compound comprising a polymer and non-reactive metal blend, said polymer comprising 79% by weight monomer X, and the balance monomer Y, wherein a set point is induced using ultra-violet light.
- (D) (A) and (B).
- (E) None of the above.

33. Which, if any, of the following claims is (are) improper?

- (A) A gadget as in any one of the preceding claims, in which
- (B) A gadget according to Claims 3 and 4, further comprising
- (C) A gadget according to Claims 1-3, in which
- (D) A gadget according to Claim 3 or 4, further comprising
- (E) (B) and (C)

34. A multiple dependent claim may not properly depend upon:

- (A) an independent claim.
- (B) claim dependent on a single claim.
- (C) a claim which is dependent from a multiple dependent claim.
- (D) a claim containing Markush language.
- (E) (C) and (D).

35. Given the following information regarding three claims:

- (i) A claim refers to "said lever" where the claim contains no earlier recitation or limitation of a lever;
- (ii) A claim initially refers to "an aluminum lever," and "a plastic lever" and thereafter refers to "said lever"; and
- (iii) A claim initially refers to a "controlled stream of fluid" and thereafter refers to "the controlled fluid,"

which of the following statements is correct?

- (A) The claims in (i), (ii) and (iii) are all definite.
- (B) The claims in (i) and (ii) are definite; and the claim in (iii) is indefinite.
- (C) The claim in (i) is indefinite; and the claims in (ii) and (iii) are definite.
- (D) The claims (i) and (ii) are indefinite; and the claim in (iii) is definite.
- (E) The claims in (i), (ii) and (iii) are all indefinite.

36. Which of the following statements is true?

- (i) An applicant cannot use a patent to prove the state of the art for the purpose of the enablement requirement if the patent has an issue date later than the effective filing date of the application.
 - (ii) A publication dated after the effective filing date of an application may be properly used to demonstrate that an application is nonenabling if the publication provides evidence of what one skilled in the art would have known on or before the application's effective filing date.
 - (iii) The state of the art existing at the issue date of the patent is used to determine whether a particular disclosure in the patent is enabling.
- (A) (i), (ii) and (iii) are all true.
 - (B) (i) and (ii) are true; (iii) is false.

- (C) (i) is false; (ii) and (iii) are true.
- (D) (i) is true; (ii) and (iii) are false.
- (E) (i), (ii) and (iii) are all false.

17. Which of the following expressions, when found in a claim, comply with the provisions of the second paragraph of 35 U.S.C. § 112?

- (A) containing A, B, and optionally C
- (B) material such as rock, wool or asbestos
- (C) lighter hydrocarbons, such, for example, as the vapors or gas produced
- (D) normal operating conditions such as while in the container of a proportioner
- (E) such material as wood and the like

38. Which of the following is not a correct statement regarding the consideration of asserted therapeutic or pharmacological utility?

- (A) Evidence of pharmacological or other biological activity of a compound will be relevant to an asserted therapeutic use if there is reasonable correlation between the activity in question and the asserted utility.
- (B) An applicant can establish a correlation by relying on statistically relevant data documenting the activity of a compound or composition which is claimed.
- (C) The applicant does not have to prove that a correlation exists between a particular activity and an asserted therapeutic use of a compound as a matter of statistical certainty.
- (D) An applicant must provide evidence of success in treating humans where such a utility is disclosed.
- (E) An applicant need not provide evidence that an animal model for the human disease condition had been established prior to the filing date of the application.

39. Which one of the following statements regarding establishment of a *prima facie* case of obviousness is not correct?

- (A) There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.
- (B) There must be a reasonable expectation of success.
- (C) The prior art reference (or references when combined) must teach or would have suggested all the limitations in the claim.
- (D) The teaching or suggestion to make the claimed combination that is found in the applicant's disclosure may be used by the examiner.
- (E) The prior art references when combined, cannot render the prior art unsatisfactory for its intended purpose.

40. In which of the following situations may an affidavit or declaration under 37 CFR § 1.131 be properly used?

- (A) Where the reference publication date is more than one year before applicant's or patent owner's effective filing date.
- (B) Where the reference, a U.S. Patent, with a patent date less than one year prior to applicant's effective filing date, shows but does not claim the same patentable invention.
- (C) Where the subject matter relied upon is evidence under 35 U.S.C. § 102(f).
- (D) Where the reference is a prior U.S. patent to the same inventive entity claiming the same invention.
- (E) Where the applicant has clearly admitted on the record that the prior art invention was prior to his invention.

41. Claim 1 in a patent application is directed to a method for whitening teeth. Claims 1 through 5 read as follows:

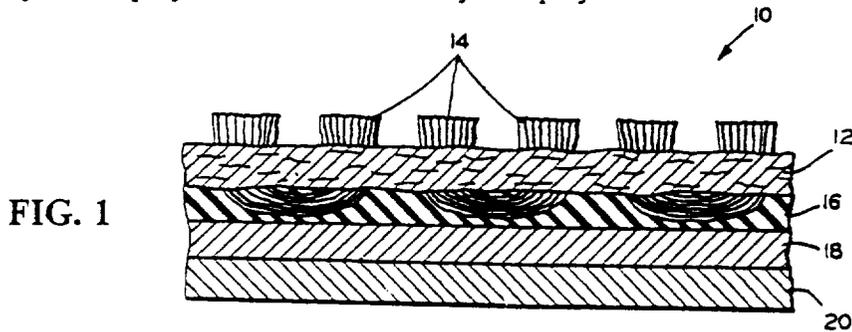
1. A method for whitening teeth comprising isolating the teeth to be treated; preparing a bleaching composition comprising an oxygen-radical generating agent; applying said composition to said isolated teeth; and exposing each of said isolated teeth to laser light from an argon laser for a selected time to accelerate whitening.
2. The method of Claim 1, wherein said bleaching composition further comprises a booster selected from the group consisting of ammonium persulfate and sodium persulfate, and a buffer selected from the group consisting of sodium carbonate and sodium bicarbonate.
3. The oxygen radical-generating agent of Claim 1, where said generator is selected from the group consisting of hydrogen peroxide and sodium carbonate peroxide.
4. The buffer agent according to Claim 2, wherein said buffering agent is any other buffering agent which maintains a pH of said composition between 7 and 10.
5. A method according to Claim 4, wherein said argon laser has a wavelength range in the visible spectrum between 410 and 522 nanometers.

Which of the following is (are) proper dependent claim(s) in accordance with 37 CFR § 1.75?

- (A) Claim 2.
- (B) Claim 3.
- (C) Claim 4.
- (D) Claim 5.
- (E) Claims 2 through 5.

42. A patent application is under preparation to be filed in the PTO. The application discloses and describes a tufted carpet shown in the drawing below (Figure 1) having several components. The following independent claim has been drafted:

1. A tufted carpet (10) comprising:
 - a primary backing (12) having loops of yarn (14) forming a tufted structure projecting outwardly from said primary backing;
 - a layer of latex (16) affixed to the primary backing;
 - a layer of polyolefin (18) affixed to the layer of latex; and
 - a secondary backing (20) consisting of a woven synthetic polyolefin affixed to the layer of polyolefin.



In the absence of issues of supporting disclosure, which of the following would not be a proper dependent claim when the application is filed in the PTO?

- (A) 2. The tufted carpet according to Claim 1, wherein the primary backing is jute, cotton, or a synthetic fiber.
- (B) 2. The tufted carpet according to Claim 1, wherein the secondary backing is woven cotton, or a woven synthetic polyolefin.
- (C) 2. The tufted carpet according to Claim 1, wherein the loops of yarn are selected from the group consisting of polyester, polyamide, nylon, and polyolefin.
- (D) 2. The tufted carpet according to Claim 1, wherein the polyolefin layer is selected from the group consisting of polyethylene, and polypropylene.
- (E) All are proper dependent claims.

43. Patent practitioner Smith filed a patent application for adhesive compositions having a paste-like consistency and comprising filler admixed with liquid monomer, the filler being water-insoluble solid filler which forms a paste with the liquid monomer, and is essentially inert with respect to the monomer and is insoluble in the monomer. The specification states, "The compositions of this invention must contain, as essential ingredients, at least one monomer of a class of alpha-cyanoacrylic acid esters and at least one filler." The compositions are characterized as being capable of being applied to a substrate submerged in water. Which of the following claims properly sets forth the composition?

- (A) An adhesive composition comprising a filler admixed with a liquid monomer of a class known as alpha-cyanoacrylic acid esters, the filler being water-insoluble solid filler which forms a paste with the liquid monomer, and is essentially inert with respect to the monomer and is insoluble in the monomer.
- (B) An adhesive composition comprising means to admix a filler with a liquid monomer of a class known as alpha-cyanoacrylic acid esters, the filler being water-insoluble solid filler which forms a paste with the liquid monomer, and is essentially inert with respect to the monomer and is insoluble in the monomer.
- (C) An adhesive composition comprising a filler for admixture with a liquid monomer of a class known as alpha-cyanoacrylic acid esters, the filler being water-insoluble solid filler which forms a paste with the liquid monomer, and is essentially inert with respect to the monomer and is insoluble in the monomer.
- (D) An adhesive composition having a filler adapted to be admixed with a liquid monomer of a class known as alpha-cyanoacrylic acid esters, the filler being water-insoluble solid filler which forms a paste with the liquid monomer, and is essentially inert with respect to the monomer and is insoluble in the monomer.
- (E) An adhesive composition assembly having a paste-like consistency capable of being applied to a substrate submerged in water.

44. Summer discovered that by adhering cotton swabs on opposing ends of a cylindrical rod, he could use the device to clean hair and dust particles caught in screens at the rear end of a hair dryer by causing a swab to contact a surface of the screen and rotating the swab to collect the hair and dust. Summer provides patent practitioner Smith with reliable test data establishing this fact. Preliminary to preparing a patent application, Smith conducted a search of the prior art, and found that cotton swabs adhering to opposing ends of a cylindrical rod, and the method of preparing such devices were disclosed in patents issued more than one year ago. Smith also found patents published five or more years ago disclosing hair dryers having a screen at an end of the hair dryer to catch hair and dust, and prevent the same from reaching the heating element in the hair dryer. Notwithstanding, Summer wants to file a patent application on his invention. In the absence of issues of supporting disclosure, which of the following is the best claim for Summer's invention?

- (A) A method of preparing a cotton swab device, said device being characterized by being useful for removing hair and dust from hair dryers.

- (B) A cotton swab device consisting of a cylindrical rod having first and second opposing ends, a first cotton swab adhering to said first opposing end, and a second cotton swab adhering to said second opposing end.
- (C) A method of removing hair and dust particles from a screen in an end of a hair dryer comprising bringing a cotton swab of a cotton swab device into contact with a surface of a screen of a hair dryer, and rotating the swab to collect the hair and dust.
- (D) A process for using a cotton swab device to remove materials selected from the group consisting of hair and dust particles from an end of a hair dryer.
- (E) A hair dryer having a screen at an end of the hair dryer, and a cotton swab device for removing hair and dust from said screen.

45. Presented below are five separate portions of five different claims. Assuming that there are no issues of support or lack of antecedent basis, which portion does not contain a means-or-step-plus function which invokes the sixth paragraph of 35 U.S.C. § 112?

- (A) 1. In a pressure responsive instrument having a pressure responsive chamber including a wall portion movable in reply to change in fluid pressure thereon, the improvement comprising a plate means and a leaf spring; wing means on said plate means
- (B) 1. A process for recovering molybdenum values in usable form from ferruginous, molybdenum - bearing slags comprising . . . raising the pH of the resulting pulp to about 5.0 to precipitate dissolved molybdenum trihydroxide
- (C) 1. A boring device for deep boring an object rotating about an axis, comprising . . force generating means adapted to provide a force acting on the cutting head to cause radial displacement of said cutting head
- (D) 1. In an aircraft having a bladed rotor adapted under at least one translational flight condition to provide both lift and propulsive thrust, a jet driving device so constructed and located on the rotor as to drive the rotor
- (E) 1. An air filter assembly for filtering air laden with particulate matter, said assembly comprising . . . said portion having means, responsive to pressure increases in said chamber caused by said cleaning means, for moving particulate matter in a downward direction

46. On January 15, 1996, Winter filed a patent application disclosing and claiming a process for promoting growth of a ruminant by administering a pharmacologically acceptable salt of lysocellin to said ruminant. In the application, physiologically acceptable salts of lysocellin are identified as sodium lysocellin, zinc lysocellin, and manganese lysocellin. The claims in the application are as follows:

1. A process for promoting growth of a ruminant by administering to said ruminant a growth-promoting amount of a pharmaceutically acceptable salt of lysocellin selected from the group consisting of manganese lysocellin, sodium lysocellin and zinc lysocellin.
2. The process of Claim 1 wherein the pharmaceutically acceptable salt of lysocellin is manganese lysocellin.
3. The process of Claim 1 wherein the pharmaceutically acceptable salt of lysocellin is sodium lysocellin.
4. The process of Claim 1 wherein the pharmaceutically acceptable salt of lysocellin is zinc lysocellin.

Claims 1-4 in Winter's application have been twice rejected under 35 U.S.C. § 103 over a U.S. patent granted to Spring on April 15, 1997, on an application filed March 12, 1996; which, in turn is a continuation-in-part application of an application filed December 12, 1994, now abandoned. The second rejection is a final rejection. As filed on December 12, 1994, Spring's application disclosed and claimed a "process for promoting growth of ruminants by administering to ruminants a growth promoting amount of manganese lysocellin," as well as how to make and use the invention, and the best mode for carrying out the invention. As filed on March 12, 1996, Spring's CIP application disclosed and claimed a "process for promoting growth of ruminants by administering to ruminants a growth promoting amount of a member selected from the group consisting of manganese lysocellin, sodium lysocellin, and zinc lysocellin." The CIP application also discloses how to make and use the invention, and the best mode for carrying out the invention. Claim 1 in Spring's patent claims a "process for promoting growth of a ruminant by

administering to the ruminant a growth promoting amount of a lysocellin material selected from the group consisting of manganese lysocellin, sodium lysocellin, and zinc lysocellin." The rejection may be properly obviated by:

- (A) A timely appeal of the rejection of Claims 1-4 to the Board of Patent Appeals and Interferences, a timely filed brief stating that the claims stand or fall together, and arguing that Spring's parent application only discloses administering the manganese lysocellin, and Spring's patent does not present a claim confined to administering a manganese lysocellin, and timely payment of all appropriate fees.
- (B) A timely appeal of the rejection of Claims 1-4 to the Board of Patent Appeals and Interferences, a timely filed brief stating that the claims stand or fall together, and arguing that Spring's patent claims are unsupported by the disclosure in the parent application because the description of one species, the manganese lysocellin, in Spring's parent application does not amount to a written description of the class of materials or genus set forth in Spring's patent claims, and timely payment of all appropriate fees.
- (C) A timely filed reply arguing that Spring's patent claim is unsupported by the disclosure in the parent application because the description of one species, the manganese lysocellin, in Spring's parent application does not amount to a written description of the class of materials or genus set forth in Spring's patent claims.
- (D) A timely filed reply containing an amendment canceling "manganese lysocellin," in Claim 1, and arguing that Spring's patent claim does not describe the invention now claimed in Winter's application, and that there is nothing in Spring's parent application disclosing or motivating one of ordinary skill in the art to promote growth of ruminants with sodium lysocellin or zinc lysocellin.
- (E) A timely filed reply containing an amendment cancelling "manganese lysocellin," in Claim 1, and cancelling Claim 2, and arguing that there is nothing in Spring's parent application disclosing or motivating one of ordinary skill in the art to promote growth of ruminants with sodium lysocellin or zinc lysocellin.

Answer Questions 47 and 48 based upon the following information. You have drafted and filed a patent application which includes the following disclosure and drawings:

The invention comprises a blinking-light LED device 10, a pair of which are shown adhered to the outer surface of a sports shoe 11. LED device 10 is formed by a heart-shaped casing 12 molded of synthetic plastic material, such as polyethylene or polypropylene. The device may also be formed in a different shape such as a star or animal. The invention consists of an interior cavity having an LED 15 provided with leads 15A and 15B. Lead 15A has a right angle bend to define the fixed contact of a make and break switch mechanism 14 having a movable contact 16. Movable contact 16 is formed by a cantilevered flat metal spring having a weight 17 attached to its free end. The other end of the movable contact 16 is connected to the positive terminal of a 1.5V battery cell 18 whose negative terminal is connected to the positive terminal of an identical cell 19. The negative terminal of cell 19 is connected through a current limiting resistor 20 to lead 15B of the LED, thereby, completing the circuit. The weighted movable contact 16 of the make and break switch mechanism 14 is acceleration-sensitive, which means that when shoe 11 is worn by a jogger, the foot movement of the jogger gives rise to changes in velocity which are sensed by movable contact 16, causing the contact to flex momentarily, and engage fixed contact defined by lead 15A, closing the switch to provide power to LED 15. When LED 15 is activated, it emits a flash of light. A strobe effect is created because current flowing through resistor 20 causes a voltage drop developed across the resistor which abruptly inactivates the LED. Therefore, the LED is briefly activated to produce an intense flash of light, very much in the manner of a strobe flashtube.

FIG. 1

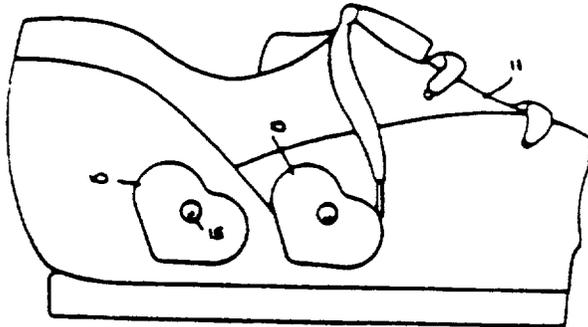
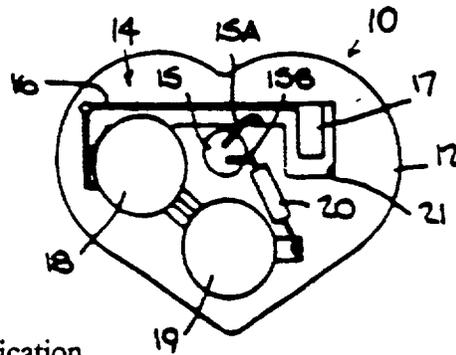


FIG. 2



The following independent claim is included in the application.

1. A blinking light LED device comprising:
 - (a) A casing (12) attachable to a shoe (11), an LED (15) mounted on the casing, said LED (15) having a first lead (15B) and a second lead (15A);
 - (b) A power source comprising batteries (18 & 19) connected in series, said power source having a positive terminal and a negative terminal, said negative terminal being connected to said first lead (15B);
 - (c) Said second lead defining a fixed contact;
 - (d) A make and break switch mechanism (14) having a movable contact defined by a

cantilevered flat spring (16) having a fixed end and a free end, said fixed end is connected to said positive terminal and said free end having a weight (17) attached thereto;

(e) Whereby movement of said movable contact causes said spring to flex and engage said fixed contact thereby causing said make and break switch mechanism to momentarily close and complete a circuit and briefly activate the LED (15).

Answer the following two questions based upon the foregoing disclosure and independent claim.

47. Which of the following claims would be a proper dependent claim?

- (A) 2. A blinking light LED device as set forth in Claim 1, further including a current-limiting resistor interposed between a lead and a terminal.
- (B) 2. A blinking light LED device according to Claim 1, wherein the invention further comprises a current-limiting resistor interposed between said first power source and said second power source.
- (C) 2. A jogger wearing a shoe as set forth in Claim 1, further including a current-limiting resistor interposed between a lead and a power source.
- (D) 2. A blinking light LED device as set forth in Claim 1, further comprising a current-limiting resistor interposed between said first lead and said negative terminal of the power source.
- (E) 2. A blinking LED shoe as set forth in Claim 1, the invention further consisting of a current-limiting resistor which causes a voltage drop to inactivate the LED.

48. You submitted the following dependent claim in the application:

- 3. A blinking light device as set forth in Claim 3, wherein the casing comprises molded synthetic plastic material.

The examiner issued a rejection under 35 U.S.C. § 112, second paragraph, citing the improper dependency of the claim. Which of the following proposed amendments will overcome the rejection?

- (A) 3. A blinking light device as set forth in Claims 1 or 2, wherein the casing comprises molded synthetic material.
- (B) 3. (Amended) A blinking light device as set forth in Claim [3] 1, wherein the casing comprises molded synthetic plastic material.
- (C) 3. (Amended) A blinking light device as set forth in [Claim] Claims 1 and 2, wherein the casing comprises molded synthetic plastic material.
- (D) 3. A blinking light device as set forth in the preceding claims [Claim 3], wherein the casing comprises molded synthetic plastic material such as polyethylene.
- (E) 3. (Amended) A blinking light device as set forth in Claim [3] 1, wherein the casing is made of synthetic plastic material.

49. A patent application is being prepared. The application discloses and describes a construction device shown in the drawing below (Figure 1) having several components. Certain "means" are not illustrated Figure 1, but are shown in other drawings not presented below or they are described elsewhere in the application. The following independent claim has been drafted:

1. A construction device comprising:
 - a frame (12);
 - a plate (20) having a front surface and a back surface, said plate being disposed in said frame;
 - a glass tube (18) supported by said back surface of said plate, and having a visually perceptible indicia and being filled with inert gas;
 - means for illuminating said glass tube; and
 - a reflective panel (22), for reflecting light transmitted from the glass tube, disposed in said frame at a spaced distance from said plate and glass tube.

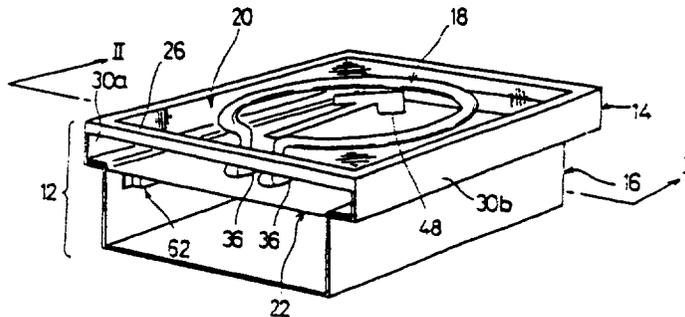


FIG. 1

In the absence of issues of supporting or enabling disclosure in the description portion of the specification, which of the following dependent claims lacks proper antecedent basis when the application is filed in the PTO?

- (A) 2. The construction device according to Claim 1, wherein said plate is made of a glass material.
- (B) 3. The construction device according to Claim 2, further comprising means to secure the glass tube to said back surface of said plate.
- (C) 4. The construction device according to Claim 1, wherein said means to secure the glass tube to said back surface of said plate is an optically transparent thermosetting resin.
- (D) 5. The construction device according to Claim 1, wherein a protection layer consisting of an optically transparent thermoplastic resin is disposed on the entirety of said back surface of said plate in such a manner that said protection layer covers at least a portion of said glass tube.
- (E) 6. The construction device according to Claim 1, wherein said inert gas is helium.

50. A patent application is filed with the following original Claim 1:

An automatic processor for processing a silver halid photographic light-sensitive material with a processing solution, the processor comprising:
a processing solution tank containing a processing solution for processing the material;
a circulating path for circulating the processing solution, and
a supply means for supplying a solid composition to the processing tank or the path wherein the following expression is satisfied:

$$V <$$

where V represents an amount of the processing in the processing tank, and Vf represents the amount of processing solution in the path.

Which of the following is in accord with proper PTO amendment practice and procedure?

- (A) In Claim 1, line 1, delete "halid" and insert in its place --halide--.
- (B) In Claim 1, line 4, add --the circulating path connect the processing tank--.
- (C) In Claim 1, line 7, after "<" insert --Vf--.
- (D) In Claim 1, line 8, after "processing" insert --solution--.
- (E) All of the above.