ANSWERS TO THE USPTO AUGUST 1998 EXAM
AFTERNOON SECTION

1. ANSWER: (D) (D) is correct because it corresponds in scope with that which the applicant regards as his invention. The second paragraph of 35 U.S.C. § 112 states: "The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." The disclosure indicates that the reaction products of polymerized cashew-shell oil and formaldehyde proved outstanding for the intended purpose, while the reaction products of polymerized nut-shell oil, other than cashew-shell oil, and formaldehyde merely "theoretically appeared" to be promising.

(A), (B), and (C) are wrong because they do not correspond in scope with that which the applicant regards as his invention. Each of these answers includes language which is unduly broad in that the language embraces materials which have not been indicated as being satisfactory for the intended purpose. *In re Spengler*, 64 USPQ 560 (CCPA 1945). As noted in the question, the reaction products of polymerized walnut-shell oil and formaldehyde did not work.

(B) and (E) are wrong because they set forth improper Markush group language. MPEP § 2173.05(h) states: "One acceptable form of alternative expression, which is commonly referred to as a Markush group, recites members as being 'selected from the group consisting of A, B and C'. It is improper to use the term 'comprising' instead of 'consisting of'." The claim fails to particularly point out and distinctly claim the subject matter which the applicant regards as his invention as required by the second paragraph of 35 U.S.C. § 112.

2. ANSWER: (C) (C) is correct because it fails to comply with 37 CFR § 1.75(c), which states: "One or more claims may be presented in dependent form, referring back to and further limiting another claim or claims in the same application." In the present case, Claim 2 refers back to Claim 1, but fails to properly limit the capacitance recited in Claim 1 because it recites the term "about" immediately before the capacitance range. The term "about" allows for a range slightly above 0.011 μf or below 0.003 μf. A range below 0.003 is outside the scope of Claim 1. See MPEP § 2144.05. Therefore, the claim in (C) does not properly limit Claim 1.

(A), (B), and (D) are wrong because they are proper dependent claims. They further limit Claim 1 by limiting the capacitance to values within the scope of Claim 1, and therefore, comply with 37 CFR § 1.75(c). In (D), the applicant may rely upon the original claim for the description of the range of capacitance. MPEP § 608.01(l). (E) is wrong because (D) is a proper dependent claim.

3. **ANSWER: (D)** The claim (A) recites sufficient acts performed on subject matter, e.g. passing the signal through the filter. See MPEP § 2173.05(q) and *Ex parte Porter,* 25 USPQ2d 1144 (Bd. Pat. App. & Int. 1992) cited therein. Therefore, (A) appropriately claims a process. (B) recites the act of polymerizing an organic compound. Therefore, (B) appropriately claims a process. The claim in (C) is not a proper process claim because it does not recite an act specifying how a use or process is accomplished. Therefore, this claim would be rejected as indefinite under 35 U.S.C. § 112 or as an improper definition of a process under 35 U.S.C. § 101. See MPEP § 2173.05(q); *Ex parte Erlich*, 3 USPQ2d 1011 (Bd. Pat. App. & Int. 1986)(claim to "A process for using monoclonal antibodies of claim 4 to isolate and purify human fibroblast interferon" was held indefinite because it merely recited a use without any active, positive steps delimiting how this use is actually practiced); *Clinical Products Ltd. v. Brenner*, 255 F.Supp. 131, 149 USPQ475 (D.D.C. 1966) (claim to "The use of a sustained release therapeutic agent in the body of ephedrine absorbed upon polystyrene sulfonic acid" is not a proper process claim under 35 U.S.C. § 101). (E) is incorrect because (C) is incorrect.

4. **ANSWER: (B)** (B) is correct because cancellation of claim 2 leaves only a process claim which involves (i) impregnation of a carrier with a silver salt deposited from solution, and (ii) an activation step involving heating in air. While Able teaches step (i), his activation step involves heating in an inert gas, whereas Baker teaches step (ii) but his impregnation step involves impregnation of a carrier with a silver salt by coating the carrier with a paste or slurry. There is no suggestion in the references to arbitrarily select Able's step (i) and Baker's step (ii) and combine them to arrive at the inventive process. Thus, the differences between the claimed process and the prior art are such that the subject matter as a whole is not obvious to a person skilled in the art to which the subject matter pertains. 35 U.S.C. § 103. *In re Brown and Saffer*, 173 USPQ 685 (CCPA 1972).

(A), (C), (D), and (E) are wrong because the product-by-process claim remains in the application. Since the patentability of such a claim does not depend on its method of production, and the product is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Brown and Saffer*, 173 USPQ 685 (CCPA 1972); *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985); MPEP § 2113.

5. **ANSWER: (E)** is correct because (B) and (C) are correct. (A) does not overcome the prior art because the broad "comprising" language permits the laminate to have additional layers, such as an intermediate adhesive layer. MPEP § 2111.03. (B) overcomes a § 102 rejection on the basis of the prior art by reciting that the transparent protective layer and the light-sensitive layer are in actual contact therewith, eliminating the possibility of an intermediate adhesive layer. (C) also avoids the prior art by using a negative limitation to particularly point out and distinctly claim that X does not claim any laminate including an adhesive layer. MPEP § 2173.05(i).

6. ANSWER: (E) (E) is correct because the rejection is based on anticipation, which means that the reference must teach every element of the claim. MPEP § 2131. The amendment to Claim 6 introduces a step not taught by the reference. Hence, the claim is not anticipated.

(A) is wrong because the rejection is based on what is *claimed*, not what is taught by Egghead. The rejected claims recite that the element is subjected "to a high energy radiation" exactly as taught by Highbrow. While Egghead's specification teaches subjecting the element "to direct high energy radiation," the term "direct" is not recited in the claims. MPEP § 2131. *Ex parte Hoffman*, 12 USPQ2d 1061, 1063. (Bd. Pat. App. & Int. 1989)

(B) is wrong because "[t]he transitional phras[e] . . . 'consisting essentially of' . . . define[s] the scope of a claim with respect to what unrecited additional components or steps, if any, are excluded from the scope of the claim," and "[w]hen an applicant contends that additional steps or materials in the prior art are excluded by the recitation of 'consisting essentially of,' applicant has the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant's invention." MPEP § 2111.03. (B) fails to meet this burden and, therefore, is not in accord with proper PTO practice and procedure.

(C) is wrong. The deletion of the language "by a chilling process" does not overcome the teachings of the Highbrow reference, i.e. "then splitting the element along the intended course of fracture by quenching." As amended in (C), Claim 6 would read, in pertinent part, "then splitting the element along the intended course of fracture." Since Egghead's specification teaches that "a chilling process, such as quenching," may be employed to carry out the step of "splitting the element along the intended course of fracture," it is clear that Highbrow's quenching step is not excluded. MPEP § 2111.03. *Ex parte Hoffman*, 12 USPQ2d 1061, 1064 (Bd. Pat. App. & Int. 1989) ("To determine the steps included versus excluded by this language, the claim must be read in light of the specification.")

(D) is wrong because there is no probative evidence in the factual scenario concerning the interpretation that an artisan with ordinary skill would place upon the claim language in question. Moreover, the specification of Egghead's application does not include a definition for this language. Under these circumstances, the claim language must be interpreted in accordance with its literal meaning and not the "new" interpretation advanced in (D). MPEP § 2111.01. *Ex parte Hoffman*, 12 USPQ2d 1061, 1063 (Bd. Pat. App. & Int. 1989).

7. ANSWER: (C) MPEP § 1411.02. (B) and (D) are incorrect because Jones did not describe the embodiment in the original patent. (A) is incorrect because the rejection based on new matter in a reissue must be made under 35 U.S.C. § 251, and not 35 U.S.C. § 132. (E) is not correct because (B) and (D) are incorrect.

8. ANSWER: (E) (E) is most correct because it is the most comprehensive answer which accords with MPEP § 608.01(m), which recites: "Reference characters corresponding to elements recited in the detailed description and the drawings may be used in conjunction with the recitation of the same elements or group of elements in the claims. The reference characters, however, should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims." (A) is wrong because it does not accord with MPEP § 608.01(m). (B) and (C) individually are not as comprehensive as answer (E). (D) is wrong because A is wrong.

9. ANSWER: (E) (E) "None of the above" is correct because (A), (B), (C), and (D) are wrong. (A) is wrong because Claim 1 is directed to a ship propeller, whereas (A) recites a claim which purports to be dependent upon Claim 1 but involves a *non sequitur*, i.e., it is directed to a copper base alloy rather than a ship propeller. Therefore, the dependent claim is indefinite and violates 35 U.S.C. § 112, paragraph 2.

(B) is wrong because Claim 1 is directed to a product, i.e., a ship propeller, whereas (B) recites a claim which purports to be dependent upon Claim 1, but involves a process step. Therefore, the claim is directed to more than one statutory class of invention and violates 35 U.S.C. § 112, paragraph 2. While a claim to a product may be permissible when defining the claimed product in terms of the process by which it is made or in terms of the process by which it is intended to be used (MPEP § 2173.05(p)), the situation presented here is different and not permissible. In this regard, the term "consisting of" in Claim 1 excludes any element, step, or ingredient not specified in the claim. Thus, as stated in MPEP § 2111.03, "A claim which depends from a claim which 'consists of' the recited elements or steps cannot add an element or step." (B) recites a claim which also violates this caveat. (C) is wrong because it recites a dependent claim which attempts to add "2 to 10 percent aluminum " to the <u>propeller</u> of Claim 1. Since the specification teaches the addition of aluminum to the copper base alloy and not the propeller of Claim 1, the dependent claim introduces new matter. Thus, the claim may be subject to a rejection under the first paragraph of 35 U.S.C. § 112. MPEP § 608.04. It is not clear from the language of the claim that the addition of aluminum is to the alloy.

(D) is wrong because it recites a dependent claim which is directed to a ship propeller according to Claim 1 including 2 to 10 percent of aluminum, which has been excluded by the term "consisting of" in Claim 1. Thus, as stated in MPEP § 2111.03, "A claim which depends from a claim which 'consists of' the recited elements or steps cannot add an element or step." (D) recites a claim which violates this caveat.

10. ANSWER: (C) Amending the claim to add specific structural dimensions or other limitations is most likely to distinguish Claim 1 from the prior art X on the basis of 35 U.S.C. § 102. MPEP § 2114. (A) is incorrect because analogous art is not a consideration for an anticipation rejection under 35 U.S.C. § 102. See *In re Schreiber*, 128 F.3d 1473, 44 USPQ2d 1429 (Fed. Cir. 1997); MPEP § 2131.05. (B) is incorrect because dispensing of candy pieces as mentioned in Claim 1 is merely a functional description that does not structurally distinguish Claim 1 from X, which can be used to dispense

liquids or solids. In *Schreiber*, claims directed to a funnel top for a popcorn dispenser were not successfully distinguished over a prior art oil funnel on the grounds that the claimed top was used for popcorn because the oil funnel inherently performs this function. *Id.* (D) is incorrect because A and B are incorrect. (E) is incorrect because an amendment such as proposed in (C), if sufficiently specific, is likely to result in issuance of the claim.

11. ANSWER: (A) (A) is correct because the disclosure of "phenyl" as an "R" group limiting the variable of Dr. Able's claim occurs only in the abandoned patent application, i.e., the '456 application, referenced in the Baker patent. Since the '456 application became available as prior art only as of the date that the public gained access to the Baker patent, i.e., June 25, 1998, the '456 application is not available as a reference because the Baker patent was granted after Dr. Able's filing date. *In re Lund*, 153 USPQ 625, 633 (CCPA 1967) cited in MPEP § 2127(a). In addition, the phenyl was not disclosed in the CIP indicating abandonment of that embodiment.

(B), (C), and (D) are wrong because their recited "R" groups are disclosed in the Baker patent. Since the filing date of the Baker patent precedes the filing date of Dr. Able's application, the Baker patent is an impediment to patentability under 35 U.S.C. § 102(e). The subject matter disclosed only in the '456 application cannot be relied on in a 35 U.S.C. § 102(e) rejection based on the Baker patent since the disclosure of phenyl in the '456 application is not public as of the filing date of the patent. MPEP § 2127(a). (E) is wrong because (A) is correct.

12. ANSWER: (D) (D) is correct because, as explained in *In re Donaldson*, 29 USPQ2d 1845, 1850 (Fed.Cir. 1994), the PTO is not exempt from following the statutory mandate of 35 U.S.C. § 112, sixth paragraph, which reads as follows:

> An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

When construed in accordance with 35 U.S.C. § 112, sixth paragraph, the means language of the claim covers the corresponding structure described in the specification and equivalents thereof. Thus, the claim recites a machine of electronic circuitry elements, and is directed to statutory subject matter as defined in 35 U.S.C. § 101. *In re Alappat*, 31 USPQ2d 1545, 1555 (Fed. Cir. 1994); MPEP § 2106, II., A. and C.

(A), (C), and (E) are wrong because the specification describes structure corresponding to each of the means for performing a specified function recited in the claim. In such case, the statutory mandate of 35 U.S.C. § 112, sixth paragraph, requires that the claim be construed to cover the described structure. Thus, the claim recites a machine and not a

method or process. As stated in *Alappat*, page 1554, "[I]t was error for the Board majority to interpret each of the means clauses in claim 15 so broadly as to 'read on any and every means for performing the functions' recited . . . and then conclude that claim 15 is nothing more than a process claim wherein each means clause represents a step in that process."

(B) is wrong because the means elements recited in the claim represent circuitry elements that perform mathematical calculations, which is essentially true of all digital electrical circuits. In such case, the claimed invention as a whole is directed to a combination of interrelated elements which combine to form a machine for converting discrete waveform data samples into anti-aliased pixel illumination intensity data to be displayed on a display means. As stated in *Alappat*, page 1557, "[T]he proper inquiry in dealing with the so called mathematical subject matter exception to [35 U.S.C.] § 101 . . . is to see whether the claimed subject matter *as a whole* is a disembodied mathematical concept, whether categorized as a mathematical formula, mathematical equation, mathematical algorithm, or the like, which in essence represents nothing more than a 'law of nature,' 'natural phenomenon,' or 'abstract idea.' If so, [*Diamond v.*] *Diehr* [*et al*, 450 U.S. 175, 209 USPQ 1 (1981)] precludes the patenting of the subject matter . . . This is not a disembodied mathematical concept which may be characterized as an 'abstract idea,' but rather a specific machine to produce a useful . . . result."

13. ANSWER: (E) because (A), (B), and (C) are true. (A) is true because Claim 11, although broad, is supported by the specification. 35 U.S.C. § 112, first paragraph. (B) is true because Claim 12 depends from and further restricts the scope of a preceding claim. 37 CFR § 1.75(c). (C) is true because Claim 13 depends from and further restricts the scope of a preceding claim, even though there is no support in the specification for a memory "greater than one gigabyte of storage." 37 CFR § 1.75(c). (D) is incorrect. As noted above, Claim 13 is a proper dependent claim.

14. ANSWER: (E) (A) is false because amended Claim 1 is broader than original Claim 1 by virtue of the deletion of the limitation "for mobile terminals." The claim as amended, covers both mobile and stationary terminals. A claim of a reissue enlarges the scope of the claims of the patent if it is broader than such claims in any respect, even though it may be narrower in other respects. MPEP § 1412.03. (B) and (C) are false because a broadening reissue application must be filed within two years after the patent issues. Failure by an applicant to include an oath or declaration filed within two years of the issuance of the patent indicating a desire to seek broader claims of the patent grant will bar a subsequent attempt to broaden the claims after the two year limit. 35 U.S.C. § 251; MPEP § 1412.03. (D) is wrong because in reissue, unlike reexamination, the examiner is free to consider all of the prior art, including prior art which the examiner considered during the original prosecution. 37 CFR § 1.176; MPEP § 1445.

15. [DELETED]

16. ANSWER: (D) is correct because MPEP § 2173.05(e) indicates that as long as a

claim phrase has a reasonable degree of clarity, such as reciting something well known in the mechanical arts, e.g., "a screw," the claim phrase is definite despite the lack of antecedent basis in the written description. (A) is not correct because MPEP § 2163.06, paragraph (c) demonstrates that an original written description may be amended to include originally claimed subject matter. (B) is not correct because MPEP § 2173.05(e) shows that a claim phrase which has no antecedent basis in the written description is not necessarily indefinite because it may have a reasonable degree of clarity to those skilled in the art. (C) is not correct because MPEP § 2164.05(b) demonstrates that ordinary skill in the mechanical arts is presumed when considering the question of enablement. (E) is not correct because MPEP § 2165.03 indicates that absent evidence to the contrary, it is assumed that the best mode is present. In the present case, "a screw" is disclosed in the drawing in the original application. The fact that the screw is not recited in the original description does not detract from the disclosure of the best mode.

17. ANSWER: (B) is correct because MPEP § 2163.05(c) shows that a limitation with the phrase "at least" has no upper limit and therefore includes all embodiments greater than the lower defined limit and in this fact situation not all embodiments are described by written description. In addition, there does not appear to be a written description for "at least 42%." (A) is not correct because the claim is distinctly limited to 42% and above. (C) is not correct because MPEP § 2164.08 shows that the full scope of the claimed invention must be enabled. The limitation of "at least 42%" was added by amendment and is not disclosed elsewhere in the application. There is no enabling disclosure for embodiments encompassed by the limitation which exceeds 80%. (D) is not correct because MPEP § 2163.05 (c) demonstrates that "at least" has no upper limit and therefore includes all embodiments greater than the 42% limit, including embodiments greater than 80%, and in this fact situation, not all embodiments are described in the written description. (E) is not correct because MPEP § 2165.03 indicates that evidence as to concealment of the best mode must be present.

18. ANSWER: (D) is correct because 35 U.S.C. § 251 permits the broadening of claims if sought within two years from the grant of the original patent. (A) is not correct because 35 U.S.C. § 251 permits the broadening of claims within two years from the grant of the original patent. (B) is not correct because removing a limitation broadens a claim which may be sought under 35 U.S.C. § 251 within two years from the grant of the original patent. (C) is not correct because 35 U.S.C. § 251 permits seeking reissuance of a patent. (E) is not correct because 35 U.S.C. § 251 permits the PTO to issue broader claims if they were sought within two years from the grant of the original patent, and are supported by a proper oath or declaration under 37 CFR § 1.75.

19. ANSWER: (C) is correct because MPEP § 2173.05(c), part (a) indicates that a preferred narrower range set forth within a broader range is an indefinite claim limitation. (A), (B), and (D) are not correct because MPEP § 2173.05(c), part (a) indicates that a preferred narrower range set forth within a broader range may render the claim indefinite. (E) is wrong because the doctrine of equivalents operates to expand claim coverage beyond the literal scope of the claim language.

20. ANSWER: (E) is correct because, as MPEP § 2164.03 indicates, if the art is unpredictable, the written description would need more detail as to how to make and use the invention in order to be enabling. (A) is not correct because patents have issued with respect to unpredictable arts. (B) is not correct because the claims may still be broad as long as they are supported by the written description. (C) is not correct because under 35 U.S.C. § 112, first paragraph, the applicant must set forth the best mode for his invention. (D) is not correct because under 37 CFR § 1.16, there is no distinction in filing fees between predictable and unpredictable technologies or arts.

21. ANSWER: (B) is correct because MPEP § 2173.05(h), part a, shows that a Markush group is an acceptable form of alternative expression provided "consisting of" and "and" are used. (A) is not correct because "or" is used. (C) is not correct because "comprising" is used. (D) is not correct because "comprising" is used, and the word "and" is omitted between the last two members of the Markush group. (E) is not correct because there is no language providing for selection from the group A, B, C, and D, thus the alternative connector "or" must be used. MPEP § 2173.05(h), part b.

22. ANSWER: (E) is the most comprehensive, correct answer. Claims (A), (B) and (C) are all in proper format. MPEP § 608.01(m). (A), (B), and (C) are incorrect because they are not the most comprehensive, correct answers. (D) is incorrect because the claims in (A) and (B) are in proper format.

23. ANSWER: (D) The third paragraph of 35 U.S.C. § 112 states that "[a] claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers." See also 37 CFR § 1.75(c). Thus, any dependent claim may be rewritten as an independent claim by expressly including all of the limitations of the base claim to which it referred. See MPEP § 608.01(n), page 600-63 (Claim Form and Arrangement). (A) is false because a dependent claim may depend upon another dependent claim so long as both are not multiple dependent claims. 35 U.S.C. § 112, third paragraph; 37 CFR § 1.75. See also MPEP § 608.01(n), page 600-63 (Rejection and Objection). (B) is false because 35 U.S.C. § 112, sixth paragraph, permits claim limitations to be written in means-plus-function format, and there is no prohibition on using this format in a dependent claim. (C) is false because a dependent claim adds further limitations to those contained in the base claim. Thus, it is possible that, even though a device might infringe a base claim, the dependent claim would not be infringed because the device does not meet the dependent claim's additional limitations. (E) is false because (A), (B), and (C) are false.

24. ANSWER: (C) The PTO does not require or recommend a minimum or maximum number of dependent claims. 37 CFR § 1.75(c). (A) is a PTO recommendation. See MPEP § 608.01(m) ("Claims should preferably be arranged in order of scope so that the first claim presented is the least restrictive."). (B) is a PTO recommendation. See MPEP § 608.01(m) ("Similarly, product and process claims should be separately grouped."). (D) is a PTO requirement. See MPEP § 608.01(n), at 600-63 (Claim Form and

Arrangement). (E) is a PTO requirement. See MPEP § 608.01(m) ("Each claim begins with a capital letter and ends with a period.").

25. ANSWERS: (C) and (D) both contain false statements and are, therefore, correct answers. Claims may contain chemical or mathematical formulas and, if necessary, may contain tables. 37 CFR § 1.58(a). Thus, (D) is a false statement. As written, (C) is also a false statement. Trademarks should be identified by capitalizing each letter of the mark. See MPEP § 608.01(v). However, capitalization alone is not enough to constitute proper use in the claim. As discussed in MPEP § 2173.05(u), a claim should be carefully analyzed to determine how a trademark is used in the claim. "If the trademark . . . is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph." *Id.* citing *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark cannot be used to properly identify any particular material or product. "If a trademark . . . appears in a claim and is not intended as a limitation in the claim, the question of why it is in the claim should be addressed." MPEP § 2173.05(u). Thus, it is not true that trademarks may be used in the claim **only if** each letter in the trademark is capitalized. More is needed than capitalization of the trademark to be considered proper use of a trademark in the claim. (A) is a true statement because "the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description." 37 CFR § 1.75(d)(1); See also MPEP § 608.01(o) ("The meaning of every term used in any of the claims should be apparent from the descriptive portion of the specification with clear disclosure as to its import; . . . ."). (B) is a true statement. See MPEP § 608.01(o) ("A term used in the claims may be given a special meaning in the description. No term may be given a meaning repugnant to the usual meaning of the term."). (E) is true. Figures are permitted where necessary. MPEP § 2173.05(s); see *Ex parte Fressola*, 27 USPQ2d 1608, 1609 (Bd. Pat. App. & Int. 1993).

26. ANSWER: (D) is correct because it provides antecedent basis for "said first and second leg members" referred to in limitation (iv). 35 U.S.C. § 112, second paragraph; MPEP § 2173.05(e). Choices (A) and (B) are incorrect because they do not recite a first and second leg member. The first and second leg members are referred to in limitation (iv). Choice (C) is incorrect because there is no antecedent basis for the underside of the base member. Choice (E) is incorrect because there is no antecedent basis for the corners of the base member.

27. ANSWER: (B) properly claims the process for producing the polyester which is novel and nonobvious. 35 U.S.C. §§ 102 and 103; *Ex parte Edwards*, 231 USPQ 981 (Bd. Pat. App. & Int. 1986); *In re Thorpe*, 777 F.2d 695, 697, 227 USPQ 964 (Fed.Cir. 1985); and MPEP § 2112.02. Answers (A) and (C)-(E) are wrong because they claim the product in product-by-process format, whereas the novelty is in the process, not the product. MPEP §§ 2113 and 2173.05 (p).

28. ANSWER: (B) is the correct answer. 37 CFR § 1.153(a) ("The claim shall be in

formal terms to the ornamental design for the article (specifying name) as shown, or as shown and described."). (A) does not properly claim the design for the article "as shown." (C) does not properly claim the ornamental design for the "specific" article. (D) does not properly claim the "ornamental design" for the article. (E) is incorrect because (B) is correct.

29. ANSWER: (B) is the correct answer because it would claim the unique structure in a separate application in compliance with 37 CFR § 1.153. Rule 153 states that "More than one claim is neither required nor permitted." MPEP § 1502.01. (A) is incorrect because a design application may only have one claim. MPEP § 1502.01. (C) is incorrect because it claims the unique surface ornamentation, not the structure. (D) is incorrect because it claims a unique method, as opposed to the unique structure. (E) is incorrect because (B) is correct.

30. ANSWER: (E) 35 U.S.C. § 171 indicates that the provisions of the Patent Act relating to utility inventions apply to designs "except as otherwise provided." The Patent Act, the Rules of Practice in Patent Cases, and the pertinent case law do not exempt designs from the written description, best mode, definiteness and independent claim requirements of 35 U.S.C. § 112. Accordingly, (E) is correct. (A), (B), (C), and (D) are incorrect because the written description, best mode, definiteness and independent claim requirements of 35 U.S.C. § 112 apply to design applications.

31. ANSWER: (C) No claim is required. 35 U.S.C. § 111(b)(2). (A), (B), and (D) are required. 35 U.S.C. § 111(b)(1)(A). Therefore, (A), (B), and (D) are wrong. (E) is wrong because (C) is correct.

32. ANSWER: (E) In composition claims, where the claimed and prior art products are identical or substantially identical in structure or composition, a prima facie case of either anticipation or obviousness has been established. *In re Spada*, 15 USPQ 1655 (Fed. Cir. 1990); MPEP § 2112.01. All of the claims in (A), (B), (C), and (D) are drawn to the unpatentable composition, not the method of inducing the set point of the composition. In other words, none of the claims in (A), (B), and (C) are directed to the novel method or process of inducing a set point. Therefore, (D), which is more comprehensive than either (A) or (B), is also incorrect.

33. ANSWER: (E) is the most comprehensive, correct answer. MPEP § 608.01(n) ("One or more claims may be presented in dependent form, referring back to and further limiting another claim or claims in the same application."). As set forth in 37 CFR § 1.75 (c), "[a]ny dependent claim which refers to more than one other claim (multiple dependent claim) shall refer to such other claims in the alternative only." The claims in (A) and (D) are proper. See MPEP § 608.01(n), page 600-58 (See "Acceptable Multiple Dependent Claim Wording") (C) and (D) are incorrect because they are not, individually, the most comprehensive, correct answer.

34. ANSWER: (C) MPEP § 608.01(n). Multiple dependent claims are authorized as

long as they are in alternative form, referring to only one set of claims. Cumulative claiming is improper. For example, it is acceptable to use the alternative language "a machine according to claims 3 or 4, further comprising . . . ," but unacceptable to use the cumulative language "a machine according to claims 3 and 4, further comprising . . . ." A multiple dependent claim depending indirectly from another multiple dependent claim would result in cumulative language. (A), (B), and (D) are incorrect because they present proper claim dependency. 37 CFR § 1.75. (E) is incorrect because (D) is an incorrect answer.

35. ANSWER: (D) MPEP § 2173.05(e). Claim (i) is indefinite because the claim does not contain the earlier limitation of a "lever" referenced by "said lever"; claim (ii) is indefinite because it is unclear which of the two previously recited levers "said lever" is referring to; claim (iii) is definite since it is clear that the "the controlled fluid" is referring back to the earlier claimed "controlled stream of fluid". *Ex parte Porter*, 25 USPQ2d 1144, 1145 (Bd. Pat. App. & Int. 1992).

36. ANSWER: (B) MPEP § 2164.05(a). Statement (i) is true because a later dated publication cannot be used to enable an earlier dated application; Statement (ii) is true since an examiner can look to later dated art if the art discloses the state of the art at the time of the invention; Statement (iii) is false since enablement is judged at the date of filing and later dated references cannot be used to establish enablement.

37. ANSWER: (A) (A) is definite. MPEP § 2173.05(h), part (c). (B) is indefinite because it uses the phrase "such as." MPEP § 2173.05 (d). (C) is indefinite because it uses the phrase "such, for example, as." Id. (D) is indefinite because it uses the phrase "such as." Id. (E) is indefinite because it uses the phrase "such . . .as." Id. (E) is also indefinite because it uses the phrase "and the like." MPEP § 2173.05(b), part (f).

38. ANSWER: (D) MPEP § 2107.02, part (a). ("The applicant does not . . . have to provide actual evidence of success in treating humans where such a utility is asserted.") (A) is true because such evidence is relevant if there is such a correlatión. MPEP § 2107.02, part (a). (B) is a true statement because an applicant can rely on such evidence to show a correlation. MPEP § 2107.02, part (a). (C) is a true statement because statistical certainty is not required. MPEP § 2107.02, part (a). (E) is true since applicant need not provide such evidence. MPEP § 2107.02, part (c).

39. ANSWER: (D) is the correct answer. (D) is a false statement since one cannot look to the applicant's specification to find the motivation to combine the references. MPEP § 2143. (A) is true since there must be suggestion or motivation to combine the references either in the references or known generally to a person of ordinary skill in the art. MPEP § 2143.01. (B) is true since there must be a reasonable expectation of success. MPEP § 2143.02. (C) is true because all of the claim limitations must be taught or suggested by the prior art. MPEP § 2143.03. (E) is true. MPEP § 2143.01.

40. ANSWER: (B) is correct since the reference is within the one-year period an

applicant is permitted to attempt to swear behind and the disclosed subject matter is not claimed. MPEP § 715; 37 CFR § 1.131. (A) is incorrect since one cannot swear back more than one year. MPEP § 715. (C) is incorrect since the subject matter is also evidence under § 102(f). Id. (D) is incorrect since a rejection based on "double patenting" would be made, and a Rule131 affidavit would not overcome the rejection. Id. (E) is incorrect since the applicant has admitted the prior invention is prior to his invention. See *In re Hellsund,* 474 F.2d 1307, 177 USPQ 170 (CCPA 1973); MPEP § 715.

41. ANSWER: (A) 37 CFR § 1.75(c). Claim 2 further limits the scope of Claim 1 inasmuch as both claims are directed to a method, and Claim 2 limits "said bleaching composition" of Claim 1. Claim 3 in (B) is not a proper dependent claim because Claim 3 does not further limit Claim 1. Claim 3 is directed to an oxygen radical-generating agent, whereas Claim 1 is directed to a method. Claim 4 in (C) is not a proper dependent claim because it does not limit the scope of Claim 2. Claim 2 is drawn to a method whereas Claim 4 is drawn to a buffer agent. MPEP § 2173.05(p). *Ex parte Lyell,* 17 USPQ2d 1548 (Bd. Pat. App. & Int. 1990). Claim 5 in (D) is not a proper dependent claim because it does not further limit the invention of Claim 4. Claim 5 is directed to a method according to Claim 4, whereas Claim 4 is directed to a buffering agent. (E) is incorrect inasmuch as (B), (C), and (D) are incorrect.

42. ANSWER: (B) When "consisting of" appears in a clause of a claim, as opposed to immediately following the preamble, it limits only the element set forth in that clause, other elements are not excluded from the claim as a whole. *Mannesmann Demag Corp. v. Engineered Metal Products Co.,* 793 F.2d 1279, 230 USPQ 45 (Fed. Cir. 1986); MPEP § 2111.03. The transitional phrase "consisting of" in the last clause of Claim 1 excludes any element from the claims not specified in Claim 1. *In re Gray,* 53 F.2d 520, 11 USPQ 225 (CCPA 1931); *Ex parte Davis,* 80 USPQ 448, 450 (Bd. App. 1948) ("consisting of" defined as "closing the claim to the inclusion of materials other than those recited except for impurities ordinarily associated therewith"). In Claim 1, "consisting of" is a transitional phrase between "secondary backing" and "woven synthetic polyolefin." Thus, "consisting of" precludes the secondary backing from being made of components other than or in addition to "woven synthetic polyolefin," e.g., it precludes "cotton" in the dependent claim in (B). Further, the claim in (B) must further limit the claim from which it depends. The claim in (B) cannot properly add a component, cotton, excluded by the last clause in Claim 1. A dependent claim must further limit the claim from which it depends. 37 CFR § 1.75(c). The claim in (B) does not further limit Claim 1 by reciting the same limitation, "woven synthetic polyolefin," as is set forth in Claim 1. In (A), (C), and (D), the claims further limit Claim 1 by further defining particular elements recited in Claim 1. The transitional term "comprising" immediately following the preamble in Claim 1 is inclusive or open-ended, and does not exclude further limitations except where "consisting of" appears in a clause after the preamble. MPEP § 2111.03. There is nothing in Claim 1 limiting the materials which may constitute the primary backing. In (A), Claim 1 is further limited by identifying the materials constituting the primary backing. Regarding the tufts of yarn in Claim 1, the material must be yarn, but other than

being yarn, nothing in Claim 1 limits the materials which constitute the yarn. In (C), Claim 1 is further limited by requiring the yarn to be particular materials. Regarding the polyolefin layer in Claim 1, the material must be a polyolefin, but Claim 1 does not limit the scope of the polyolefins. In (D), Claim 1 is further limited by requiring the polyolefin to be one of two polyolefins. (E) is not the most correct answer because the claim in (B) is an improper dependent claim.

43. ANSWER: (A) 35 U.S.C. § 112, first paragraph; *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976); MPEP §§ 2164.08(c) and 2174. (A) describes the composition being an admixture of the filler and the essential ingredient. (B) through (E) do not describe the composition of an admixture of a filler and the essential ingredient, alpha-cyanoacrylic acid esters. In (B), "means to admix" describes the existence of a mixing means, such as a device, to mix filler and monomer, as opposed to a currently existing admixture of filler and monomer. In (C), "filler for admixture with a liquid monomer" describes the existence of a filler for admixture with a monomer, as opposed to a filler currently admixed with the liquid monomer. In (D), a "filler adapted to be admixed with a liquid monomer" describes an intended use for the filler, as opposed to describing a current admixture of the filler and liquid monomer. In (E), the claim does not particularly point out and distinctly claim the admixture constituting the composition, including the essential ingredient. Further, the words "capable of being applied" describes an intended use of a composition, as opposed to a currently existing composition. Regarding (B) through (E), the enablement disclosure does not describe an adhesive composition without the filler and alpha-cyanoacrylic acid esters being an admixture.

44. ANSWER: (C) 35 U.S.C. §§ 102 and 112, second paragraph. (C) is correct because it recites a two step process which is not disclosed in the patents. The process steps of bringing a cotton swab of a cotton swab device into contact with a surface of a screen, and rotating the swab to collect hair and dust are novel. (A) and (D) are improper process claims because no steps are recited. As is pointed out in MPEP § 2173.05(q), an attempt to claim a process without setting forth any steps involved in the process generally raises an issue of indefiniteness under 35 U.S.C. § 112, second paragraph. *Ex parte Erlich*, 3 USPQ2d 1011 (Bd. Pat. App. & Int. 1986). (B) and (E) are incorrect because they claim devices which are anticipated by the patent references. 35 U.S.C. §§ 102(a) and (b).

45. ANSWER: (A) 35 U.S.C. § 112, sixth paragraph; MPEP § 2181. The term "means" when employed, as in the instant claim, to denote a "structureless" structural element of the invention is devoid of any connotation. The terms "plate" and "wing," as modifiers of the structureless term "means," specify no function to be performed, as is self-evident if one attempts to recast into the alternative grammatical form of "means for plating" or "means for winging." Whatever functions are to be performed by the "plate" and "wing" means of the instant claim, they have not been specified in the claim, as is required by statute. *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967). (B) properly invokes the sixth paragraph. 35 U.S.C. § 112, sixth (formerly third) paragraph, sanctions

functionally defined steps in claims drawn to a combination of steps. The step of "raising the pH" is properly functional, as this is a common industrial expedient, and almost always means merely adding any alkali that does not interfere with the process reactions. *Ex parte Zimmerley*, 153 USPQ 367 (Bd. App. 1966). (C) properly invokes the sixth paragraph. *De Graffenried v. U.S.*, 16 USPQ2d 1321 (Ct. Cl. 1990). (D) also properly invokes the sixth paragraph. *Ex parte Stanley*, 121 USPQ 621 (Bd. App. 1958) (it is not necessary to use the word "means" in a means-plus function clause, the term "device" coupled with a function is a proper definition of structure and is therefore within the requirements of 35 U.S.C. § 112, last paragraph; the addition of the words "jet driving" to the term "device" merely renders the latter term more definite and specific). (E) also properly invokes the sixth paragraph. *In re Donaldson*, 29 USPQ2d 1845 (Fed. Cir.1994).

46. ANSWER: (E) In (E), the cancellation of the limitation in Claim 1 and the cancellation of Claim 2 obviates the rejection with respect to these claims, the use of sodium or zinc lysocellin is not disclosed in Spring's parent application, and the argument properly addresses the lack of disclosure and motivation to use sodium or zinc lysocellin in the process. MPEP § 201.11, page 200-31 (See, When Not Entitled to Benefit of Filing Date); and MPEP § 2136.03, part (d). In (A), if one claim is unpatentable over Spring, the rejection must be sustained as to all claims because "all the claims stand or fall together." Spring is available as prior art under 35 U.S.C. § 102(e), and the use of manganese lysocellin is disclosed in the parent application, the CIP application. The disclosure of a process using manganese lysocellin is effective as of the filing date of the parent application, December 12, 1994, which antedates the Winter's filing date. Since all the claims stand or fall together, no patent is obtainable in this situation. *Alexander Milburn Co. v. Davis-Bournonville Co.*, 270 U.S. 390 (1926); MPEP § 2136.04; *Ex parte Ebata*, 19 USPQ2d 1952 (Bd. Pat. App. & Int. 1991); MPEP § 2136.03. Regarding (B) and (C), the process using manganese lysocellin is fully described within the meaning of 35 U.S.C. § 112, first paragraph, in the parent application, and the description of a single embodiment of a broadly claimed subject matter constitutes a description of the invention for anticipation purposes. *In re Lukach*, 442 F.2d 967, 970, 169 USPQ 797 (CCPA 1971); MPEP §§ 201.11 and 2163.05, part b. Anticipation is the epitome of obviousness. Spring teaches the manganese lysocellin of Claims 1 and 2. Thus, in (B), since all the claims stand or fall together, the appeal cannot succeed in overcoming the rejection of Claims 3 and 4. In (C), the rejection continues to apply to Claims 1 and 2. In (D), the Spring patent continues to be available as prior art under 35 U.S.C. § 102(e) against claim 2 in Winter's application.

47. ANSWER: (D) The claim in answer (D) properly sets forth the resistor and unambiguously identifies its position in the circuit. Answer (A) sets forth a claim which is indefinite because two leads and two terminals have been set forth in Claim 1, and Claim 2 does not specify which lead and terminal is being interrelated to the resistor. MPEP § 2173.05(e). Answer (B) is incorrect because only a singular power source has been set forth in Claim 1. Answer (C) sets forth a preamble drawn to a different invention and is indefinite with respect to the position of the resistor. Answer (E) claims

a shoe in the preamble which is not the same preamble as in Claim 1. While the device is attachable to a shoe, Claim 1 does not require a shoe to be part of the invention. MPEP § 2172.01.

48. ANSWER: (B) The amended claim in (B) is in compliance with 37 CFR § 1.121(a)(2)(ii). Answer (A) is not correct because the claim does not include "amended" and the new language is not underlined and "plastic" has been deleted from the claim without brackets. 37 CFR § 1.121(a)(2)(ii). Answer (C) includes unacceptable multiple dependent claim wording, and deletes "3," without bracketing since the claim dependency has been changed. MPEP § 608.01(n). Answer (D) includes improper multiple dependent claim wording. MPEP § 608.01(n). In Answer (E) "1" is not underlined, and "comprises molded" in the original claim has been changed to "made of" without indicating the change. 37 CFR § 1.121(a)(2)(ii).

49. ANSWER: (C) 35 U.S.C. § 112, second paragraph. MPEP § 2173.05(e). Claim 4 in (C) refers to Claim 1. Claim 4 purports to limit Claim 1 with regard to "said means to secure the glass tube." However, in Claim 1, there is no reference to a "means to secure the glass tube." Thus, there is no antecedent basis in Claim 1 for the referral in Claim 4 to "said means to secure the glass tube." Consequently, Claim 4 is indefinite. 35 U.S.C. § 112, second paragraph. Claims 2, 3, 5, and 6 appearing, respectively, in answers (A), (B), (D), and (E), properly further limit the claim from which they depend. The transitional term "comprising" immediately following the preamble in Claim 1 is inclusive or open-ended, and does not exclude further unrecited elements except where "consisting of" appears in a clause after the preamble. MPEP § 2111.03. Inasmuch as there are no "consisting of" expressions in Claim 1, Claims 2, 3, 5, and 6 further limit Claim 1 by adding structural elements, and/or by further limiting the scope of elements recited in Claim 1. 37 CFR § 1.75(c); MPEP § 2111.03.

50. ANSWER: (A) 37 CFR § 1.121(a)(2)(i). The amendment specifies the exact matter to be deleted and inserted, it specifies the exact point where the deletion and insertion are to be made (where "halid" occurs in line 1 of Claim 1 inasmuch as it occurs only once in line 1), and is limited to 5 words or less. (B) is not the most correct answer. The amendment does not specify the exact point where the insertion is to occur, and the amendment would insert more than 5 words. (C) is not the most correct answer. An equation or non-word material should not be amended by instructions to add or delete a part of the equation or non-word material. Rather, the amendment should be made by instructions to delete the entire equation or non-word material and add in its place the equation or non-word material to be substituted for the material that was deleted. See "Final Rule, Correction" in the *Federal Register* of November 17, 1997, 62 *Fed. Reg.* 61235, and in the *Official Gazette* of November 25, 1997, 1204 *Off. Gaz. Pat. Office* 90. Accord, MPEP § 1411. (D) is not the most correct answer. The word "processing" occurs twice in line 8. It is not clear whether the instruction applies to making the insertion after the first or second occurrence, or after both occurrences of "processing." (E) is not the most correct answer inasmuch as (B), (C), and (D) are not correct answers.