

How to Evaluate and Respond to Legal Arguments Based on Case Law
Part II – Workshop
Blank Worksheet

The purpose of this workshop is to consider how legal arguments that cite case law in response to an examiner's rejection can be evaluated and addressed. The workshop examples are hypothetical and include a partial claim set, a rejection under 35 U.S.C. 103, and applicant's reply to that rejection. The rejections are streamlined for the purposes of this training in that they do not point to the particular portion of the references where the relevant teaching may be found; thus they should not be considered to be model rejections. The examples span a range of technological subject matter, but the issues for discussion are common across technologies.

This training is intended to enhance the quality of examination by providing guidance in evaluating case law based arguments, and in clearly stating the examiner's position on the record. This training is not designed to teach examiners how to write rejections. Specifically, although the examples in this training employ obviousness rejections, this is not obviousness training. Rather, because most examiners deal with 35 U.S.C. 103 frequently, obviousness is being used as a vehicle for considering attorney responses to rejections.

Any other patentability issues that may be raised by these hypothetical claims are not relevant to this workshop, and should not be a focus of discussion. During actual examination, however, examiners would be expected to follow compact prosecution practices and provide rejections, objections, or clarifying remarks as appropriate for a complete Office action.

For this workshop, assume that all applications are being examined under the first-inventor-to-file provisions of the America Invents Act (AIA/FITF), and that each rejection is part of a non-final first action on the merits.

NOTE: When relevant arguments are properly presented in response to a rejection, the examiner must consider the response. Thereafter, if the examiner concludes that it is more likely than not that the claim is unpatentable (the preponderance standard), the rejection should be maintained; otherwise it should be withdrawn. Although the examples in this workshop sometimes point out particular flaws in an attorney's response to a rejection, the question of whether to maintain or withdraw a rejection should always be answered in view of the fact that the examiner may reject only when a *prima facie* case of unpatentability is established. Each time that an examiner makes or maintains a rejection, he or she has the responsibility to ensure that the claim is unpatentable under the preponderance standard in view of all relevant arguments and evidence that are present at that time. See, for example, MPEP 2142.

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Chemical Workshop Example A

Claim

1. A method of treating a skin disorder comprising topically administering, at the site of the disorder, a composition comprising:

a therapeutically effective dosage amount of indomethacin sufficient to inhibit prostaglandin synthesis, and

an amount of Compound A or a pharmaceutically acceptable salt of Compound A that is effective to transport the dosage amount of indomethacin percutaneously into the epidermis.

The examiner's rejection

Claim 1 is rejected under 35 U.S.C. § 103 as being unpatentable over Diamond in view of Sanford.

Claim 1 is drawn to a method for treating a skin disease by topically administering a composition that comprises (a) indomethacin to inhibit prostaglandin synthesis, and (b) Compound A as a percutaneous transport agent.

Diamond teaches pharmaceutical compositions comprising Compound A and topically administrable drugs. More particularly, Diamond discloses that non-steroidal anti-inflammatory drugs (NSAIDs) can be transported through the skin when formulated together with Compound A and applied topically. Diamond teaches that such compositions are particularly useful in the field of dermatology. Diamond does not specifically disclose indomethacin.

Sanford teaches that indomethacin is a non-steroidal anti-inflammatory drug that is known to inhibit prostaglandin synthesis and to reduce pain. Sanford also discloses that indomethacin is useful for treatment of skin disorders.

It would have been obvious for a person of ordinary skill in the art, as of the effective filing date of the claimed invention, to choose indomethacin as taught by Sanford as the particular NSAID to be incorporated into the pharmaceutical composition of Diamond. A person of ordinary skill would have been motivated to do so because Diamond had taught that NSAIDs generally could be incorporated into topically administrable compositions comprising Compound A, and Sanford had confirmed that indomethacin was an NSAID known to be useful for treatment of skin disorders. Thus, in view of the teachings of Diamond and Sanford, there would have been a reasonable expectation that a composition comprising indomethacin and Compound A could be successfully prepared and used in a method for treating a skin disease.

The attorney's response

In order for a combination of references to render an invention obvious it must be apparent that their teachings can be combined. *In re Avery*, 518 F.2d 1228, 186 USPQ 161 (CCPA 1975). Obviousness cannot be established by combining teachings of the prior art to produce the claimed invention, absent some teachings, suggestion or incentive supporting the combination. *In re Geiger*, 815 F.2d 686, 2 USPQ2d 1276 (Fed. Cir. 1987); *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). When the incentive to combine the teachings of the references is not immediately apparent, it is the duty of the examiner to explain why the combination of the teachings is proper. *Ex parte Skinner*, 2 USPQ2d 1788 (BPAI 1986). The mere fact that references can be combined does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination, *Berghauser v. Dann*, 204 USPQ 393 (D.D.C. 1979); *ACS Hospital Sys. v. Montefiore Hospital*, 732 F.2d 1572, 221 USPQ 929 (Fed. Cir. 1984). Citing references which merely indicate that isolated elements and/or features recited in the claims are known is not a sufficient basis for concluding that the combination of claimed elements would have been obvious. *Ex parte Hiyamizu*, 10 USPQ2d 1393 (BPAI 1988). The same conclusion is true where the references expressly teach away from what the PTO contends is obvious from the references, *In re Grasseli*, 713 F.2d 731, 218 USPQ 769 (Fed. Cir. 1983), or where the examiner's proposed modification would render the prior art version unsatisfactory for its intended purpose, *Ex parte Rosenfeld*, 130 USPQ 113 (POBA 1961). Accord, *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984); *In re Kramer*, 18 USPQ2d 1415 (Fed. Cir. 1991) (unpublished decision). The references, viewed by themselves and not in retrospect, must suggest doing what applicants have done. *In re Shaffer*, 229 F.2d 476, 108 USPQ 326 (CCPA 1956); *In re Skoll*, 523 F.2d 1392, 187 USPQ 481 (CCPA 1975).

The mere fact it is possible for two isolated disclosures to be combined does not render the result of that combination obvious absent a logical reason of record which justifies the combination. *In re Regel*, 526 F.2d 1399, 188 USPQ 136 (CCPA 1975). To properly combine two references to reach a conclusion of obviousness, there must be some teachings, suggestion or inference in either or both of the references, or knowledge generally available to one of ordinary skill in the art, which would have led one to combine the relevant teachings of the two references. *Ashland Oil v. Delta Resins & Refractories*, 776 F.2d 281, 227 USPQ 657 (Fed. Cir. 1985). Both the suggestion to make the claimed composition or device or carry out the claimed process and the reasonable expectation of success must be founded in the prior art, not in Applicants' disclosure. *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991).

The mere allegation that the differences between the claimed subject matter and the prior art are obvious does not create a presumption of unpatentability which forces an Applicant to prove conclusively that the Patent Office is wrong. *In re Soli*, 317 F.2d 941, 137 USPQ 797 (CCPA 1963). The ultimate legal conclusion of obviousness must be based on facts or records, not on the Examiner's unsupported allegation that a particular structural modification is "well

known” and thus obvious. Subjective opinions are of little weight against contrary evidence. *In re Wagner*, 371 F.2d 877, 152 USPQ 552 (CCPA 1967). If the examiner seeks to rely upon a theory of chemistry for obviousness, he must provide evidentiary support for the existence and meaning of that theory. *In re Grose*, 592 F.2d 1161, 201 USPQ 57 (CCPA 1979). Unless the Applicants question the accuracy of a statement of the Examiner unsupported by the art of record, or by presenting evidence to contradict it, it will probably be accepted as true on appeal. *In re Shapleigh*, 248 F.2d 96, 115 USPQ 129 (CCPA 1957). Data in the specification showing the claimed article possesses characteristics not possessed by the prior art should be accepted as accurate, notwithstanding the contrary opinion expressed *sua sponte* by the Board of Appeals. *In re Ehringer*, 347 F.2d 612, 146 USPQ 31 (CCPA 1965), (shock-resistant, vibration-resistant and non-sag filament wire).

Questions

Q1. What arguments does the attorney make that the examiner has failed to establish a *prima facie* case of obviousness?

A1.

Q2. Is it necessary for the examiner to review the cited cases before replying to the attorney in the next Office action?

A2.

Q3. Does the attorney cite any cases that the examiner is not obligated to follow because they are not precedential decisions?

A3.

Chemical Workshop Example B

Claims

1. A pharmaceutical composition comprising cytotoxic drug X and polyol Y as a stabilizing agent, wherein polyol Y is present in an amount of up to about 75% by weight.
2. The pharmaceutical composition of claim 1, wherein polyol Y is present in an amount of about 50% by weight.
3. The pharmaceutical composition of claim 1, wherein polyol Y is present in an amount of about 25% by weight.

The examiner's rejection

Claim 1 is rejected under 35 U.S.C. § 103 as being unpatentable over Smith in view of Jones.

Claim 1 is drawn to a pharmaceutical composition comprising cytotoxic drug X and up to about 75% by weight of polyol Y as a stabilizing agent. Claims 2 and 3 depend from claim 1 and further limit the amount of polyol Y to about 50% and about 25%, respectively.

Smith teaches pharmaceutical compositions comprising cytotoxic drug X and a polyol as a carrier. Smith does not teach that the polyol should be specifically polyol Y, or that the polyol acts as a stabilizing agent. Smith is silent as to the amount of polyol to be included.

Jones teaches that polyols, including specifically polyol Y, are useful for stabilizing pharmaceutical compositions comprising cytotoxic drugs.

It would have been obvious for a person of ordinary skill in the art, as of the effective filing date of the claimed invention, to include polyol Y in an amount of up to about 75% by weight in a pharmaceutical composition comprising cytotoxic drug X. A person of ordinary skill would have been motivated to choose polyol Y as the specific polyol to include in the cytotoxic drug composition of Smith because Jones had taught that polyol Y was useful as a stabilizing agent for cytotoxic drug compositions. As for the amounts of polyol Y required by the claims, a person of ordinary skill in the art would have been motivated to adjust the amount of polyol Y in order to obtain a workable product that is stable. It is noted that no criticality has been demonstrated in the specification with regard to the amounts recited in the claims.

The attorney's response

The Examiner has failed to provide a *prima facie* case of obviousness in view of the limitations on the amount of polyol Y in claims 1-3. The Examiner has acknowledged that the cited references fail to teach inclusion of polyol Y in the specific amounts or ranges required by the claims. However, the Examiner has concluded that these formulations would have been suggested in view of Smith's teaching that polyols may be included as a carrier and Jones's teaching that polyol Y may be used to stabilize compositions comprising cytotoxic drugs. There is no reasonable basis for concluding that one of ordinary skill would have modified the Smith compositions to include polyol Y in the specific amounts or ranges required by the claims.

The MPEP clearly states that "only result-effective variables can be optimized." MPEP § 2144.05(II)(B). "A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation." *Id.* As stated in MPEP § 2144.05(II)(B), the Examiner "should not succumb to hindsight claims of obviousness" on the rationale that "researchers can only vary all parameters or try each of numerous possible choices until one possibly arrives at a successful result, where the prior art gives either no indication of which parameters are critical or no direction as to which of many possible choices is likely to be successful." *The Procter & Gamble Co. v. Teva Pharma. USA, Inc.*, 566 F.3d 989, 996-97 (Fed. Cir. 2009). "[P]atents are not barred just because it was obvious to explore a new technology or general approach that seemed to be a promising field of experimentation, where the prior art gave only general guidance as to the particular form of the claimed invention or how to achieve it." *Id.* at 997. Smith and Jones each fail to provide any guidance that would support a theory of optimization of the amount of polyol Y in connection with any particular outcome or secondary effect. As a result, there is no basis to presume that this parameter is subject to routine optimization, and even less so to presume that optimization would have led to the stabilized compositions as now claimed.

For all of the above reasons, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103 is respectfully requested.

Questions

Q1. What arguments does the attorney make that the examiner has failed to establish a *prima facie* case of obviousness?

A1.

Q2. Does the attorney argue that there would have been no reason to include polyol Y in the cytotoxic drug composition taught by Smith?

A2.

Q3. Citing MPEP § 2144.05(II)(B), the attorney asserts that the MPEP “clearly states that ‘only result-effective variables can be optimized.’ ” Is that an accurate statement about the MPEP?

A3.

Q4. The attorney cites the *Procter & Gamble* case. What can we learn about that case from the MPEP?

A4.

Q5. Does the current revision of MPEP § 2144.05(II)(B) support the attorney's contention that the examiner's rejection was improper because the references do not identify the amount of polyol Y as a result-effective variable with regard to stability of the composition?

A5.

Electrical Workshop Example A

Claim

1. An apparatus for managing nodes in a network comprising:

a cryptography system for encrypting data to be transmitted through the network, and

a network reservation system for identifying a plurality of next nodes in the network based on a destination for the encrypted data,

wherein the plurality of next nodes are indirectly connected to a source node from which the encrypted data is sent to the destination via at least one other node, the destination being among the plurality of next nodes, and

wherein the network reservation system further selectively implements pre-reserved paths along the plurality of next nodes for transmitting the encrypted data.

The examiner's rejection

[Practice Note: The first two limitations of Claim 1 (“a cryptography system for encrypting” and “a network reservation system for identifying”) invoke 35 U.S.C. 112(f). Assume that the Office action includes a statement noting this claim interpretation and identifying the structure in the specification that performs the associated function for each limitation in accordance with best practices.]

Claim 1 is rejected under 35 U.S.C. 103 as being unpatentable over Seger in view of Mason.

Seger teaches a cryptography system configured to encrypt data to be transmitted through a network to form encrypted data, wherein the encrypted data is transmitted through a plurality of next nodes without decryption until the encrypted data arrives at the destination.

Seger fails to disclose the setting of the pre-reserved paths or routes for transmitting data.

Mason teaches selectively implementing pre-reserved paths along a plurality of next nodes for transmitting data in a switch network. Mason further states that such selective implementation of pre-reserved paths is useful for enhancing the efficiency of the network.

It would have been obvious for a person of ordinary skill in the art at the time of the effective filing date of the claimed invention to use the pre-reserved paths of Mason in the

cryptography system of Seger for the purpose of providing a more efficient system as suggested by Mason.

The attorney's response

The Examiner rejected claim 1 as obvious under 35 U.S.C. § 103 over Seger in view of Mason. This rejection is respectfully traversed.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. *In re Fritch*, 972 F.2d 1260, 1262 (Fed. Cir. 1992). When the incentive to combine the teachings of the references is not immediately apparent, it is the duty of the examiner to explain why the combination of the teachings is proper. *Ex parte Skinner*, 2 USPQ2d 1788 (BPAI 1986). The mere fact that references can be combined does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination, *Berghauser v. Dann*, 204 USPQ 393 (D.D.C. 1979). No *prima facie* case of obviousness has been established where the examiner's proposed modification would render the prior art version unsatisfactory for its intended purpose. *In re Kramer*, 18 USPQ2d 1415 (Fed. Cir. 1991) (unpublished decision).

In *Graham v. John Deere Co.*, 383 U.S. 1 (1966), the Court set out a framework for applying the statutory language of §103. *KSR Int'l v. Teleflex* 550 U.S. 398 (2007). The analysis is objective:

Under §103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or non-obviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. *Graham*, at 17-18.

Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. *Id.* To facilitate review, this analysis should be made explicit. *KSR Int'l v. Teleflex*; *See In re Kahn*, 441 F. 3d 977, 988 (CA Fed. 2006).

“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *KSR Int'l v. Teleflex*. “An invention may be a combination

of old elements disclosed in multiple prior art references.” *Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc.*, 424 F.3d 1293, 1321 (Fed. Cir. 2005). “The mere recitation of the words ‘common sense’ without any support adds nothing to the obviousness equation.” *Mintz v. Dietz & Watson*, 679 F.3d 1372, 1377 (Fed. Cir. 2012). “This court has consistently pronounced that all evidence pertaining to the objective indicia of nonobviousness must be considered before reaching an obviousness conclusion.” See, e.g., *In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litigation.*, 676 F.3d 1063, 1076 (Fed. Cir. 2012).

The rejection should be withdrawn.

Questions

Q1. What arguments does the attorney make that the examiner has failed to establish a *prima facie* case of obviousness?

A1.

Q2. Is it necessary for the examiner to review the cited cases before replying to the attorney in the next Office action?

A2.

Q3. Does the attorney cite any cases that the examiner is not obligated to follow because they are not precedential decisions?

A3.

Electrical Workshop Example B

Claims

1. A semiconductor chip redistribution layer comprising an electrical conductor path, the electrical conductor path comprising copper and one additional conductive material, wherein the additional conductive material is present in an amount of at least 0.5 % by weight of the electrical conductor path.
2. The semiconductor chip redistribution layer of claim 1, wherein the additional conductive material is tantalum.
3. The semiconductor chip redistribution layer of claim 1 or 2, wherein the electrical conductor path has a tensile strength of more than 100 MPa.

The examiner's rejection

Claim 1 is rejected under 35 U.S.C. § 103 as being unpatentable over James in view of Thomas.

Claim 1 is drawn to a semiconductor chip redistribution layer comprising an electrical conductor path. The electrical conductor path must include copper and one additional conductive material, and the additional conductive material must make up at least 0.5 % by weight of the electrical conductor path. Claim 2 depends from claim 1 and further limits the additional conductive material to tantalum. Claim 3 depends from claim 1 or claim 2 and requires that the electrical conductor path have a tensile strength of more than 100 MPa.

James teaches that alloys of copper and tantalum may be used as the electrical conductor path of a redistribution layer for semiconductor chips. James does not state that tantalum should make up at least 0.5 % by weight of the electrical conductor path.

Thomas teaches alloys of copper and tantalum that are 0.5-1.5% tantalum by weight, and that such alloys have a tensile strength of 200-300 MPa.

It would have been obvious for a person of ordinary skill in the art, as of the effective filing date of the claimed invention, to use a copper-tantalum alloy as taught by Thomas in the redistribution layer of James. James had taught that copper-tantalum alloys in general were useful in formulating redistribution layers for semiconductor chips. Because no criticality has been demonstrated for the claimed weight percent of tantalum, a person of ordinary skill would reasonably have selected the alloys of Thomas for use in the electrical conductor path of James. Furthermore, a person of ordinary skill would reasonably have expected that the stated tensile strength of the Thomas alloys would have made them advantageous for use in redistribution layers for the purpose of making the layers stronger and less likely to break.

The attorney's response

In order to assess the question of obviousness, it is USPTO policy that appropriate factual findings are required; see the 2010 KSR Guidelines published in the Federal Register (Vol. 75, No. 169, page 53645, left hand column). In particular, it has to be considered whether the prior art would actually discourage and teach away from the claimed invention. See *Crocs, Inc. v. U.S. Int'l Trade Comm'n*, 598 F.3d 1294 (Fed. Cir. 2010), cited in the 2010 KSR Guidelines (Federal Register, Vol. 75, No. 169 on page 53647).

The specification of the present patent application explains the art-recognized method for decreasing the probability of breakages of the conductive path of the redistribution layer, and cites several references that teach this method. For example, the Haverty reference cited in the specification teaches that persons of ordinary skill in the art recognize that the optimum way to compensate for the mechanical stress occurring in the redistribution layer is to incorporate rubber-elastic elevations in specific forms or shapes. Further, the specification describes that according to Haverty, there is a known general electronic component having metal-coated elevations formed of a rubber elastic, silicone-based elastomer by a printing process.

Thomas acknowledges a correlation between tensile strength and the relative amount of tantalum in a copper-tantalum alloy.

However, before the effective filing date of the claimed invention a person of ordinary skill in the art would have had no reason to use the copper alloys with high ultimate tensile strength described by Thomas as a material of an electrical conductor path. In particular, regarding material properties, Haverty proposes to use rubber-elastic elevations for compensating for mechanical stress. Hence, in view of Haverty, the combination of James and Thomas does not provide a predictable result for a person of ordinary skill in the art. A predictable result is necessary for a rejection for non-obviousness, so the rejection under 35 U.S.C. 103 should be withdrawn, in accordance with the 2010 KSR Guidelines published in the Federal Register (Vol. 75, No. 169, page 53647, right-hand column, first and second paragraph).

For these reasons, claims 1-3 would not have been not obvious to a person of ordinary skill before the effective filing date of the claimed invention. Reconsideration and withdrawal of the rejections under 35 U.S.C. § 103 is respectfully requested.

Questions

Q1. What arguments does the attorney make that the examiner has failed to establish a *prima facie* case of obviousness?

A1.

Q2. What support does the attorney provide for the arguments?

A2.

Q3: Do the 2010 KSR Guidelines and the *Crocs* case support the attorney's position?

A3:

Mechanical Workshop Example A

Claim

1. An armlet comprising:

a first pouch configured to securely hold a smartphone while enabling usage thereof; and
a second pouch configured to contain an auxiliary power supply, wherein said auxiliary power supply and said smartphone are configured to be in operative communication,

wherein said armlet is made substantially of leather and provides protection against impact, abrasion and other hazards to a forearm when worn.

The examiner's rejection

Claim 1 is rejected under 35 U.S.C. 103 as being unpatentable over Sampson in view of Harinaka.

Sampson teaches an armlet comprising a pouch configured to hold a smartphone or other electronic device. The armlet of Sampson may optionally comprise a second pouch in operative communication with the first pouch to hold additional items such as an auxiliary power supply. The armlet of Sampson is made of synthetic material such as Neoprene or Kevlar. Sampson does not teach that the armlet may be made of leather.

Harinaka teaches that a variety of protective wearable gear may be made of leather, including protective sleeves. The protective gear of Harinaka may also be configured to include pouches or pockets for carrying small items.

It would have been obvious for a person of ordinary skill in the art at the time of the effective filing date of the claimed invention to use leather as taught by Harinaka as the material for the armlet of Sampson. A person of ordinary skill would have been motivated to do so, with a reasonable expectation of success, because leather was a well-known material for wearable protective gear as taught by Harinaka.

The attorney's argument

In order for a combination of references to render an invention obvious it must be apparent that their teachings can be combined. *In re Avery*, 518 F.2d 1228, 186 USPQ 161 (CCPA 1975). Obviousness cannot be established by combining teachings of the prior art to

produce the claimed invention, absent some teachings, suggestion or incentive supporting the combination. *In re Geiger*, 815 F.2d 686, 2 USPQ2d 1276 (Fed. Cir. 1987); *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). When the incentive to combine the teachings of the references is not immediately apparent, it is the duty of the examiner to explain why the combination of the teachings is proper. *Ex parte Skinner*, 2 USPQ2d 1788 (BPAI 1986). The mere fact that references can be combined does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination, *Berghauser v. Dann*, 204 USPQ 393 (D.D.C. 1979); *ACS Hospital Sys. v. Montefiore Hospital*, 732 F.2d 1572, 221 USPQ 929 (Fed. Cir. 1984). Citing references which merely indicate that isolated elements and/or features recited in the claims are known is not a sufficient basis for concluding that the combination of Claimed elements would have been obvious. *Ex parte Hiyamizu*, 10 USPQ2d 1393 (BPAI 1988). The same conclusion is true where the references expressly teach away from what the PTO contends is obvious from the references, *In re Grasseli*, 713 F.2d 731, 218 USPQ 769 (Fed. Cir. 1983), or where the examiner's proposed modification would render the prior art version unsatisfactory for its intended purpose, *Ex parte Rosenfeld*, 130 USPQ 113 (POBA 1961). Accord, *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984); *In re Kramer*, 18 USPQ2d 1415 (Fed. Cir. 1991) (unpublished decision). The references, viewed by themselves and not in retrospect, must suggest doing what applicants have done. *In re Shaffer*, 229 F.2d 476, 108 USPQ 326 (CCPA 1956); *In re Skoll*, 523 F.2d 1392, 187 USPQ 481 (CCPA 1975).

The mere fact it is possible for two isolated disclosures to be combined does not render the result of that combination obvious absent a logical reason of record which justifies the combination. *In re Regel*, 526 F.2d 1399, 188 USPQ 136 (CCPA 1975). To properly combine two references to reach a conclusion of obviousness, there must be some teachings, suggestion or inference in either or both of the references, or knowledge generally available to one of ordinary skill in the art, which would have led one to combine the relevant teachings of the two references. *Ashland Oil v. Delta Resins & Refractories*, 776 F.2d 281, 227 USPQ 657 (Fed. Cir. 1985). Both the suggestion to make the claimed composition or device or carry out the claimed process and the reasonable expectation of success must be founded in the prior art, not in Applicants' disclosure. *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991).

The mere allegation that the differences between the claimed subject matter and the prior art are obvious does not create a presumption of unpatentability which forces an Applicant to prove conclusively that the Patent Office is wrong. *In re Soli*, 317 F.2d 941, 137 USPQ 797 (CCPA 1963). The ultimate legal conclusion of obviousness must be based on facts or records, not on the Examiner's unsupported allegation that a particular structural modification is "well known" and thus obvious. Subjective opinions are of little weight against contrary evidence. *In re Wagner*, 371 F.2d 877, 152 USPQ 552 (CCPA 1967). If the examiner seeks to rely upon a theory of chemistry for obviousness, he must provide evidentiary support for the existence and meaning of that theory. *In re Grose*, 592 F.2d 1161, 201 USPQ 57 (CCPA 1979). Unless the

Applicants question the accuracy of a statement of the Examiner unsupported by the art of record, or by presenting evidence to contradict it, it will probably be accepted as true on appeal. *In re Shapleigh*, 248 F.2d 96, 115 USPQ 129 (CCPA 1957). Data in the specification showing the claimed article possesses characteristics not possessed by the prior art should be accepted as accurate, notwithstanding the contrary opinion expressed *sua sponte* by the Board of Appeals. *In re Ehringer*, 347 F.2d 612, 146 USPQ 31 (CCPA 1965), (shock-resistant, vibration-resistant and non-sag filament wire).

Questions

Q1. What arguments does the attorney make that the examiner has failed to establish a *prima facie* case of obviousness?

A1.

Q2. Is it necessary for the examiner to review the cited cases before replying to the attorney in the next Office action?

A2.

Q3. Does the attorney cite any cases that the examiner is not obligated to follow because they are not precedential decisions?

A3.

Mechanical Workshop Example B

Claim

1. A microscope slide handling system comprising:

a plurality of slide supports, each support comprising a surface to support a microscope slide and a heating element that underlies the surface so as to transfer heat to a microscope slide resting on the surface;

at least one reagent dispenser that can dispense a liquid reagent onto a microscope slide on one of the slide supports;

a movable carriage that causes the reagent dispenser to be aligned over a desired microscope slide on one of the slide supports, so that reagent dispensed out of the reagent dispenser drops onto an underlying microscope slide on one of the slide supports; and

a control system programmed with instructions for applying reagents and heat to a plurality of microscope slides bearing biological samples, wherein the control system issues commands to cause relative motion between the reagent dispenser and a microscope slide on one of the slide supports so that the reagent dispenser is aligned over the microscope slide on one of the slide supports and issues commands to cause the heating elements to heat at specified times, the control system controlling heating of one heating element to a different temperature than another.

The examiner's rejection

Claim 1 is rejected under 35 U.S.C. 103 as being unpatentable over Varma in view of Reynolds.

Varma teaches a microscope slide handling system that comprises a program which includes instructions for selectively applying heat to a plurality of microscope slides. The microscope slides may be used for biological samples. Varma also teaches a plurality of slide supports that contain heating elements as claimed, as well as a control system to cause the heating elements to heat at times and temperatures specified by the program. Varma states that the program may be configured such that the various heating elements may be at different temperatures from each other. The microscope slide handling system of Varma may be used when specimens mounted on slides are to be stained, and this process involves delivery of liquid reagents to the slides.

Varma does not teach a reagent dispenser with a moveable carriage as a component of the microscope slide handling system.

Reynolds teaches an automated dispensing apparatus for dispensing chemical reagents and other liquids onto one or more members of an array of substrates, as well as methods particularly adapted for dispensing precise quantities of chemical reagents onto a receptive membrane, such as to form a diagnostic test strip. The dispensing apparatus of Reynolds includes a movable carriage that aligns the reagent dispenser over a desired substrate, in accordance with a control program, so that the reagent is delivered onto a desired substrate.

It would have been obvious for a person of ordinary skill in the art at the time of the effective filing date of the claimed invention to incorporate the dispensing apparatus of Reynolds into the microscope handling system of Varma. A person of ordinary skill would have been motivated to do so, with a reasonable expectation of success, for the purpose of automating the process of staining biological specimens on slides, while ensuring delivery of an accurate amount of the staining reagent.

The attorney's response

The Examiner rejected claim 1 under 35 U.S.C. § 103 as obvious over Varma in view of Reynolds reference. The applicant respectfully asserts that the Examiner has improperly combined non-analogous references in the present rejection.

The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters*, 214 USPQ 735 (BPAI 1979). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 180 USPQ 580 (CCPA 1974). However, a claimed invention composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741 (2007). The *KSR* court stated that "it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does ... because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known." *Id.* Specifically, there must be some articulated reasoning with a rational underpinning to support a conclusion of obviousness; a conclusory statement will not suffice. *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006). Indeed, the factual inquiry determining whether to combine references must be thorough and searching, and it must be based on objective evidence of record. *In re Lee*, 61 USPQ2d 1430, 1436 (Fed. Cir. 2002).

Furthermore, there must be some reason to combine references other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044 (Fed. Cir. 1988). One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re*

Fine, 837 F.2d 1071 (Fed. Cir. 1988). The Federal Circuit has warned that the Examiner must not “fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.” *In re Dembiczak*, F.3d 994, 999 (Fed. Cir. 1999) (quoting *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553 (Fed. Cir. 1983)).

In addition, non-analogous art cannot properly be pertinent prior art under 35 U.S.C. §103. *In re Pagliaro*, 210 USPQ 888, 892 (CCPA 1981). For the teachings of a reference to be prior art under 35 U.S.C. § 103, there must be some basis for concluding that the reference would have been considered by one skilled in the particular art working on the particular problem with which the invention pertains. *In re Horne*, 203 USPQ 969, 971 (CCPA 1979).

The determination of whether a reference is from a non-analogous art is set forth in a two-step test given in *Union Carbide Corp. v. American Can Co.*, 724 F.2d 1567 (Fed. Cir. 1984). In *Union Carbide*, the court found that the first determination was whether “the reference is within the field of the inventor’s endeavor.” If it is not, one must proceed to the second step “to determine whether the reference is reasonably pertinent to the particular problem with which the inventor was involved.” In regard to the second step, *Bott v. Four Star Corp.*, 218 USPQ 358 (E.D. Mich. 1983), determined that “analogous art is that field of art which a person of ordinary skill in the art would have been apt to refer in attempting to solve the problem solved by a proposed invention.” In addition, a relevant area of art “should be where one of ordinary skill in the art would be aware that similar problems exist.” *Id.*

Based on the foregoing two-part non-analogous art test, the Reynolds reference does not qualify as analogous art. In regard to the first step of the *Union Carbide* test, the apparatus for making a diagnostic test strip of Reynolds is clearly not in the field of Applicant’s endeavor. That is, a diagnostic test strip is not related to a stained microscope slide.

In regard to the second step of the *Union Carbide* test, the diagnostic test strip of the Reynolds reference is not reasonably pertinent to the problem with which the Applicant was involved. The present application is related to a handling system for microscope slides. See the specification at page 1, lines 5-8. Test strips have absorbent substrates that are designed to be contacted with a test sample, and to provide some information about the properties or components of the sample. Microscope slides, on the other hand, are non-absorbent and merely act as a base on which to mount the biological specimen so that it can be examined under a microscope. Thus a person seeking to solve a problem in the field of microscope slides would not look to a teaching concerning absorbent test strips. A person of ordinary skill in the art “would have been apt to refer [to the art] in attempting to solve the problem solved by a proposed invention.” *Bott*, 218 USPQ 358.

Accordingly, the Reynolds reference is non-analogous art. Applicant respectfully requests that the Examiner remove the Reynolds reference from consideration. Because the Reynolds reference cannot properly be relied on as prior art, and because the Varma reference

does not teach or suggest the invention as claimed, Applicant respectfully requests that the Examiner withdraw the rejection and allow claim 1.

Questions

Q1. What arguments does the attorney make that the examiner has failed to establish a *prima facie* case of obviousness?

A1.

Q2. Is the attorney correct that there are two ways to establish that a reference is analogous art to the claimed invention, namely (1) that the reference is within the field of the applicant's endeavor, or (2) that the reference is reasonably pertinent to the particular problem with which the applicant was involved?

A2:

Q3. How can the examiner respond to the argument that Reynolds is not analogous art to the claimed invention because Reynolds relates to an absorbent test strip rather than to a non-absorbent microscope slide?

A3.

Q4. Does the attorney cite any cases that the examiner is not obligated to follow because they are not precedential decisions?

A4.

Design Workshop Example

Coming Soon.