United States Court of Appeals for the Federal Circuit

(Serial No. 10/200,747)

IN RE ARNOLD G. KLEIN

2010-1411

Appeal from the United States Patent and Trademark Office, Board of Patent Appeals and Interferences.

Decided: June 6, 2011

LOUIS W. TOMPROS, Wilmer, Cutler, Pickering, Hale and Dorr, LLP, of Boston, Massachusetts, argued for appellant. With him on the brief were LARISSA B. PARK and KATHERINE B. DIRKS.

CHRISTINA J. HIEBER, Associate Solicitor, United States Patent and Trademark Office, of Alexandria, Virginia, argued for appellee. With her on the brief were RAYMOND T. CHEN, Solicitor, and ROBERT J. MCMANUS, Associate Solicitor.

Before NEWMAN, SCHALL, and LINN, *Circuit Judges*.

SCHALL, *Circuit Judge*.

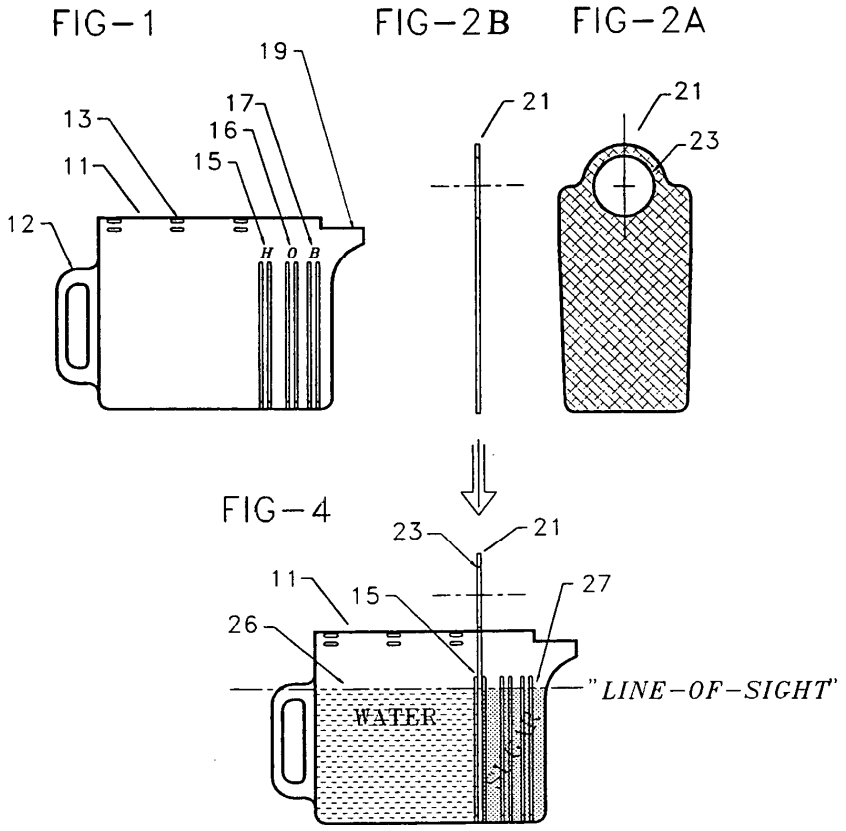
Arnold G. Klein appeals the final decision of the Board of Patent Appeals and Interferences ("Board") affirming the rejection of certain claims of U.S. Patent Application No. 10/200,747 ("'747 application") as obvious under 35 U.S.C. § 103. *Ex Parte Arnold Gregory Klein*, No. 2009-005721 (B.P.A.I. Mar. 29, 2010) ("*Decision*"). Because the Board's finding that five references at issue are analogous art is not supported by substantial evidence, the obviousness rejections cannot be sustained and, accordingly, we reverse.

BACKGROUND

I.

Mr. Klein filed the '747 application, titled "Convenience Nectar Mixing and Storage Devices," on July 24, 2002. The '747 application concerns a mixing device for use in preparation of sugar-water nectar for certain bird and butterfly feeders. J.A. 23. According to the specification, the device has a series of rails that, when engaged with a divider, allow for the creation of two compartments for separating sugar and water within the device. J.A. 27, 101. The rails are located to divide the device into proportionate volumes of one part sugar to four parts water (to make hummingbird nectar), one part sugar to six parts water (to make oriole nectar), and one part sugar to nine parts water (to make butterfly nectar). *Id.* Once the respective compartments have been filled to the same level with sugar and water, the divider is removed, allowing the sugar and water to mix and be stirred. J.A. 25, 27. The specification does not suggest that the sugar to water ratios are novel, instead disclosing in the "Background of the Invention" that these ratios are "currently recognized as being proportionally equivalent in sugar content as the birds, and butterflies [sic] natural nectar food sources." J.A. 24.

Figures 1, 2A-2B, and 4 of the '747 application, shown below, illustrate device 11, divider 21, and rails 15, 16, and 17:



J.A. 112.

The sole independent claim at issue, claim 21, recites:

> 21. A convenience nectar mixing device for use in preparation of sugar-water nectar for feeding hummingbirds, orioles or butterflies, said device comprising:
>
> a container that is adapted to receive water,
>
> receiving means fixed to said container, and

> a divider movably held by said receiving means for forming a compartment within said container, wherein said compartment has a volume that is proportionately less than a volume of said container, by a ratio established for the formulation of sugar-water nectar for hummingbirds, orioles or butterflies, wherein said compartment is adapted to receive sugar, and wherein removal of said divider from said receiving means allows mixing of said sugar and water to occur to provide said sugar-water nectar.

J.A. 403. The remaining claims at issue, claims 22-25, 29, and 30, each depend from claim 21. J.A. 403-04.

In a final rejection dated September 24, 2007, the examiner made five separate rejections under 35 U.S.C. § 103(a): (1) a rejection of claims 21, 22, and 30 over U.S. Patent No. 580,899 ("Roberts") in view of the prior art sugar to water ratios discussed in the Klein specification; (2) a rejection of claims 21, 22, and 30 over U.S. Patent No. 1,523,136 ("O'Connor") in view of the prior art sugar to water ratios discussed in the Klein specification; (3) a rejection of claims 21, 22, and 30 over U.S. Patent No. 2,985,333 ("Kirkman") in view of the prior art sugar to water ratios discussed in the Klein specification; (4) a rejection of claims 21-25 and 29 over U.S. Patent No. 2,787,268 ("Greenspan") in view of the prior art sugar to water ratios discussed in the Klein specification; and (5) a rejection of claims 21 and 29 over U.S. Patent No. 3,221,917 ("De Santo") in view of the prior art sugar to water ratios discussed in the Klein specification. Mr. Klein appealed the final rejection to the Board.

II.

The Board affirmed each of the five obviousness rejections. *See Decision* at 12-13. The Board described Rob-

erts, O'Connor, Kirkman, Greenspan, and De Santo as each "teach[ing] a device with a container having a movable divider held in place by a 'receiving means,' such as slots, grooves, or threads, which could be used to divide ingredients in specific ratios." *Decision* at 6-7. In addition, the Board pointed to the Klein specification's own statement that the sugar-water ratios were known. *Id.* at 5-6. According to the Board, "[t]hose of skill in the art would have had reason to use the known ratios with the available containers having movable dividers to achieve the correct proportions of water and sugar and to mix the ingredients for different nectars." *Id.* at 7. The Board rejected Mr. Klein's argument that the five cited references are non-analogous art. In doing so, the Board found that the prior art was properly relied upon by the examiner because it is reasonably pertinent to the problem Mr. Klein addresses, which the Board found to be "making a nectar feeder with a movable divider to prepare different ratios of sugar and water for different animals." *Id.* at 8-9.

Mr. Klein appealed. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(4) and 35 U.S.C. § 141.

DISCUSSION

Under the Patent Act, "[a] patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." 35 U.S.C. § 103(a). Although the ultimate determination of obviousness under § 103 is a question of law, it is based on several underlying factual findings, including (1) the scope and content of the prior art; (2) the level of ordinary skill in the pertinent art; (3) the differences between the

claimed invention and the prior art; and (4) evidence of secondary factors, such as commercial success, long-felt need, and the failure of others. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966).

We review the Board's ultimate determination of obviousness *de novo* and the Board's factual findings underlying that determination for substantial evidence. *In re Kotzab*, 217 F.3d 1365, 1369 (Fed. Cir. 2000). The Board's determination that a prior art reference is analogous art presents an issue of fact, reviewed for substantial evidence. *In re Icon Health & Fitness, Inc.*, 496 F.3d 1374, 1378 (Fed. Cir. 2007).

I.

On appeal, Mr. Klein argues that the Board erred when it summarily concluded that the five cited references are "reasonably pertinent to the problem addressed by Klein." *Decision* at 8-9. Although the Board made a finding of fact as to the particular problem that Mr. Klein was addressing, specifically, "making a nectar feeder with a movable divider to prepare different ratios of sugar and water for different animals," *Decision* at 8, Mr. Klein contends that the Board failed to make any finding that any of the cited references are "reasonably pertinent" to that problem. Further, Mr. Klein argues, the Board identified no evidence that suggests that an inventor seeking to solve the problem Mr. Klein was addressing, which Mr. Klein characterizes as a "multiple ratio mixing problem," would look to any of the references to address the problem of preparing different ratios. *See* Reply Br. 10-15.

The government responds that the Board correctly found that the prior art references were directed toward the same problem Mr. Klein sought to solve with his device, which the government characterizes as a "com-

partment separation problem." Appellee's Br. 26. Because "[t]he problem of keeping things separated is not unique to nectar mixing and storage devices," and "nothing about the prior art containers with adjustable, removable dividers is unique to their particular applications," the government contends that "[o]ne confronted with Klein's desire to keep two ingredients separated and also allow for them to be mixed together would have readily consulted these references to discover the broad solution therein employed, and applied it to his particular application with no more than ordinary skill required." Appellee's Br. 25-27.

II.

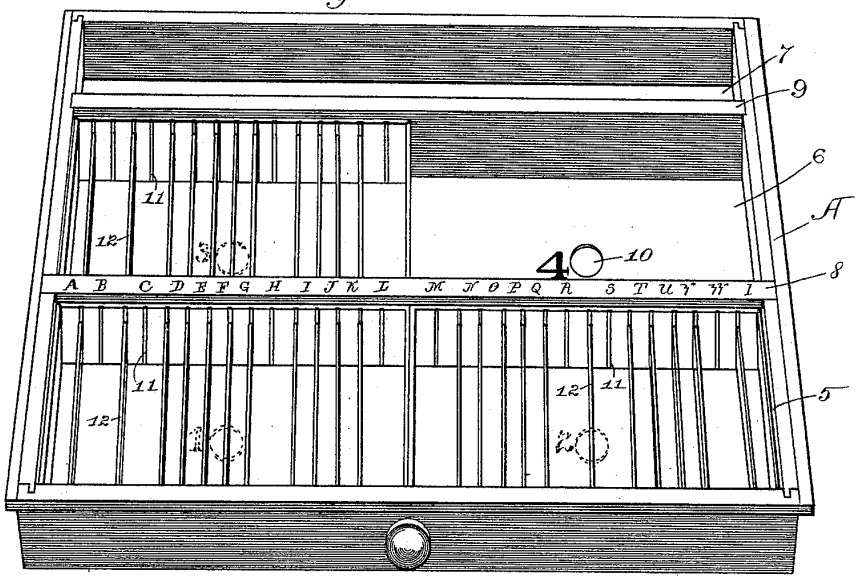
A reference qualifies as prior art for an obviousness determination under § 103 only when it is analogous to the claimed invention. *Innovention Toys, LLC, v. MGA Entertainment, Inc.*, No. 2010-1290, slip op. at 12 (Fed. Cir. Mar. 21, 2011); *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004); *In re Clay*, 966 F.2d 656, 658 (Fed. Cir. 1992). "Two separate tests define the scope of analogous prior art: (1) whether the art is from the same field of endeavor, regardless of the problem addressed and, (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved." *Bigio*, at 1325. Here, the Board focused exclusively on the "reasonably pertinent to the particular problem" test. "A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem." *Clay*, 966 F.2d at 659. "If a reference disclosure has the same purpose as the claimed invention, the reference relates to the same

problem, and that fact supports use of that reference in an obviousness rejection." *Id.*

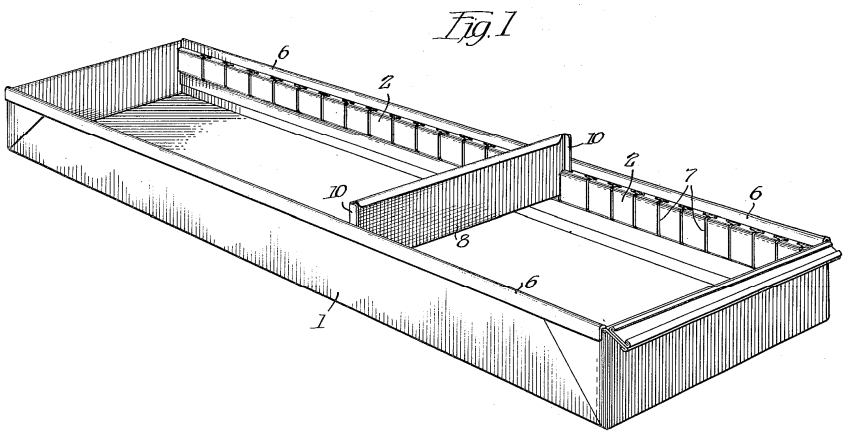
Mr. Klein does not challenge the Board's factual finding of the problem he was addressing, namely "making a nectar feeder with a movable divider to prepare different ratios of sugar and water for different animals." Mr. Klein argues, however, that Roberts, O'Connor, Kirkman, Greenspan, and De Santo are each directed to a wholly different problem than the one he faced. We examine each reference in turn.

Roberts is directed to an "Apparatus for Keeping Accounts." The apparatus of Roberts includes receptacles, such as receptacles 1 and 2 (shown in dotted lines in Figure 1 below), having a "series of vertical channels 11, adapted to receive removable partitions 12, by means of which the receptacle[s] may be subdivided into compartments." Roberts col.1 ll.41-46, col.2 ll.53-56. According to Roberts, the receptacles are "designed to receive . . . statement-cards," and each includes a hand-hole 10 to assist in removing the receptacle from a drawer. Roberts col.1 ll.34-39, col.2 ll.53-56. Figure 1 of Roberts is shown below:

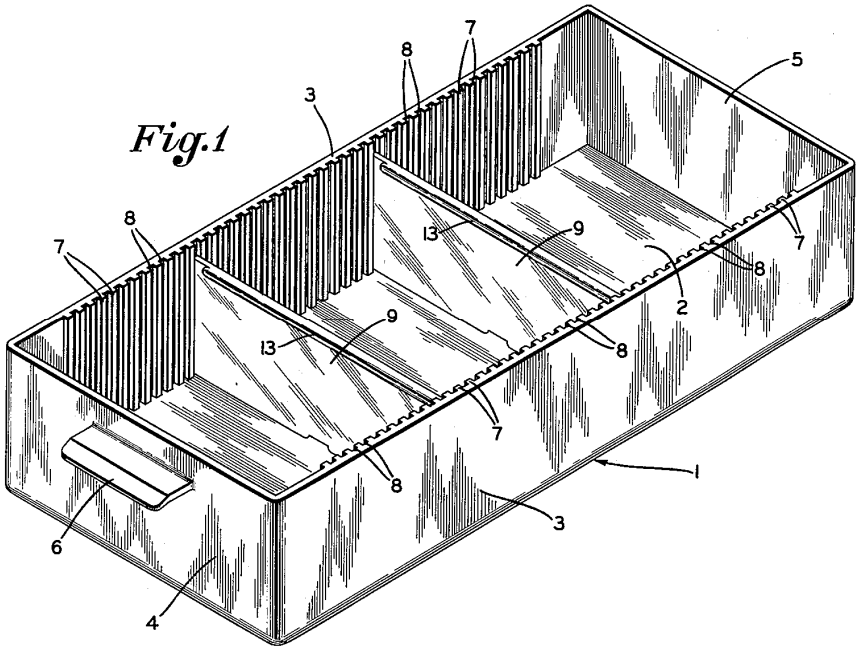
Fig. 1.



O'Connor is directed to a tool tray having dividers that are "readily movable" and that is "adapted to contain comparatively small articles, for example, drills, reamers, bits, etc., or hardware supplies such as bolts, nuts and the like." O'Connor col.1 ll.8-27. As shown in Figure 1 of O'Connor, reproduced below, divider 8 is not positioned flush with the bottom of the tray:



Kirkman is directed to a "Plastic Cabinet Drawer with Removable Partitions." Kirkman explains that it "relates to drawers for relatively small cabinets for containing various types of small articles, and more particularly to a drawer of this type provided with removable partitions or dividers, for dividing the drawer into two or more compartments of varying size, with means for frictionally holding the partitions in adjusted position [sic] within the drawer." Kirkman col.1 ll.15-21. As shown in Figure 1 of Kirkman below, the lower edge of partition 9 has a small notch:



Mr. Klein argues that, consistent with the Board's own express findings, Roberts, O'Connor, and Kirkman are each directed to a container designed to *separate* its contents, as opposed to one designed to facilitate the *mixing* of those contents. *See Decision* at 5 ("Roberts teaches a container, in particular a drawer for keeping accounts, which has removable partitions for forming compartments *for the purpose of keeping statement and account cards separated*.") (emphasis added) (citing Roberts col. 1 ll.7-13); *id.* ("O'Connor teaches a container, in particular a tool tray, with removable dividers that may be placed in the tray for forming compartments *for the purpose of keeping tools and other construction items (e.g., bolts, nuts) separated*.") (emphasis added) (citing O'Connor col.1 ll.8-20); *id.* ("Kirkman teaches a container, in particular a cabinet drawer, with removable dividers that may be placed in the drawer for forming compartments *for the purpose of keeping small household articles (e.g.,*

hardware, cosmetics, and paperclips) separated.") (emphasis added) (citing Kirkman col.1 ll.20-30). Mr. Klein also argues that, in view of (1) the hand-hole 10 of Roberts, (2) how divider 8 of O'Connor is positioned to not be flush with the bottom of the tray, and (3) the notch in the lower edge of partition 9 of Kirkman, none of these three references is "adapted to receive water," as is required by claim 21 of the '747 application.

We agree with Mr. Klein that the Board's conclusory finding that Roberts, O'Connor, and Kirkman are analogous is not supported by substantial evidence. The purpose of each of Roberts, O'Connor, or Kirkman is to separate solid objects. An inventor considering the problem of "making a nectar feeder with a movable divider to prepare different ratios of sugar and water for different animals," would not have been motivated to consider any of these references when making his invention, particularly since none of these three references shows a partitioned container that is adapted to receive water or contain it long enough to be able to prepare different ratios in the different compartments. *See Clay*, 966 F.2d at 659 ("If [a reference] is directed to a different purpose, the inventor would accordingly have had less motivation or occasion to consider it.").[1]

Turning to the remaining two references, Greenspan is directed to a "Blood Plasma Bottle" having a compartment for dried plasma and a compartment for water,

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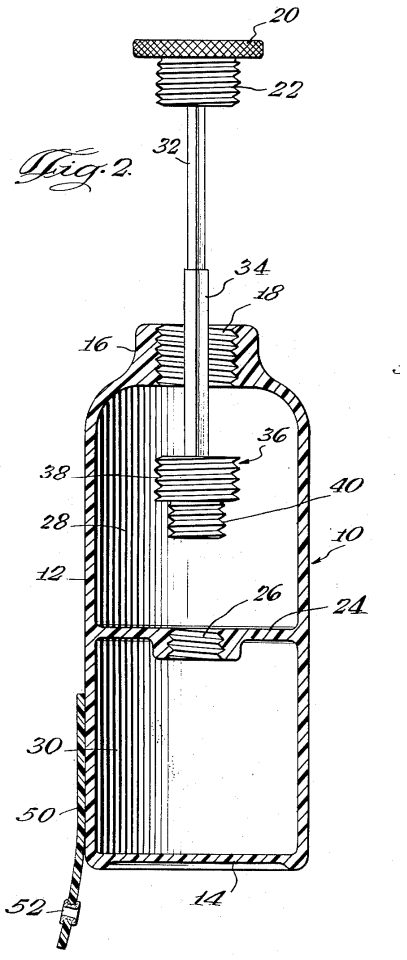
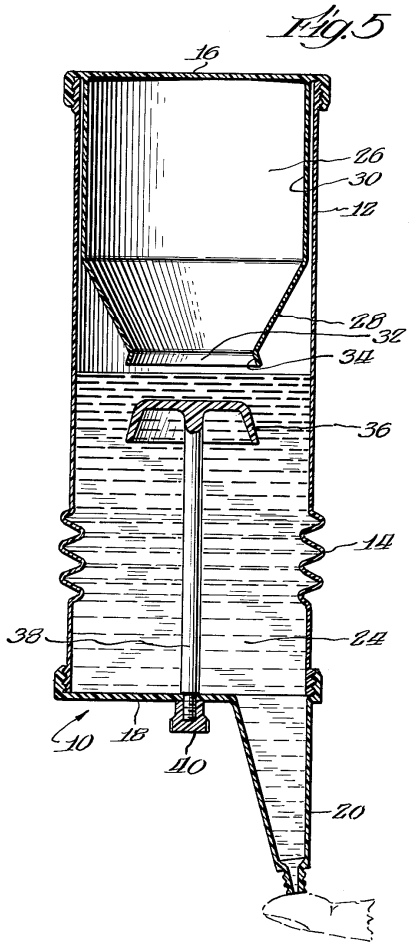
[1] We agree with Mr. Klein that, to the extent the government attempts to do so, it cannot redefine the problem Mr. Klein was addressing as a "compartment separation problem" on appeal. *See Sec. & Exch. Comm'n v. Chenery Corp.*, 318 U.S. 80, 94 (1943) ("[A]n administrative order cannot be upheld unless the grounds upon which the agency acted in exercising its powers were those upon which its action can be sustained.").

where the compartments are separated by a "wall which is normally plugged during transportation of the bottle." Greenspan col.2 ll.12-17. When the plasma is going to be used, the plasma compartment is unplugged, the plug becomes the cap for the bottle, and the bottle is shaken to dissolve the plasma. *Id.* col.2 ll.17-23. As shown in Figure 2 of Greenspan, below, the wall 24 cannot be moved to adjust the relative sizes of the lower (plasma) compartment 30 or upper (water) compartment 28:



See Greenspan col.2 ll.37-39.

De Santo's "Fluid Container" has two compartments designed to hold two different types of fluid, which can be "rapidly and thoroughly mixed together at the desired time without opening the container externally" to make, for example, hair rinses. De Santo col.1 ll.8-17, 23-28. Compartments 24 and 26 are separated by partition 28, which is "provided with a central opening 32 defining an annular valve seat 34 which is engageable with a valve member 36 to open and close the partition as desired." *Id.* col.2 ll.44-48, 55-58. As shown below in Figure 5, partition 28 is in a fixed location.



Greenspan and De Santo are not analogous, Mr. Klein argues, because they do not address multiple ratios or have a "movable divider." We agree. While Greenspan and De Santo are each directed to containers that facilitate the mixing of two separated substances together, an inventor considering the problem of "making a nectar feeder with *a movable divider to prepare different ratios* of sugar and water for different animals," would not have been motivated to consider either of these references since neither of the references shows a movable divider or the

ability to prepare different ratios.[2] *Decision* at 8 (emphasis added). In the *Decision*, the Board did not set forth any reasoning in support of its finding that Greenspan and De Santo are analogous, and thus, this finding is also not supported by substantial evidence.

Mr. Klein also challenges the Board's decision on two additional grounds. Mr. Klein's second and third arguments on appeal are that the Board erred by finding the rejected claims obvious, and that the Board improperly failed to consider Mr. Klein's evidence of long-felt need to rebut the *prima facie* case of obviousness. However, since we have determined that the Board's finding that the five references at issue are analogous art is not supported by substantial evidence, the references do not qualify as prior art under 35 U.S.C. § 103. *See Clay*, 966 F.2d at 658. Therefore, the rejections under 35 U.S.C. § 103 cannot be sustained, and we need not reach Mr. Klein's second or third argument. *See id.* at 660.

CONCLUSION

For the foregoing reasons, we reverse the decision of the Board. The case is remanded to the Board for further proceedings consistent with this opinion.

REVERSED AND REMANDED

[2] As noted above, we agree with Mr. Klein that the government cannot now redefine the problem Mr. Klein was addressing as a "compartment separation problem."