

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte SEAN C. McDONALD

Appeal No. 2006-0813  
Reexamination Control No. 90/006,235  
Patent No. 5,564,803

HEARD April 6, 2006

Before: SCHAFER, DELMENDO and TIERNEY<sup>1</sup>, Administrative Patent Judges.

SCHAFER, Administrative Patent Judge.

**DECISION ON APPEAL**

This is a decision on appeal under 35 U.S.C. §§ 134 and 306 from the final rejection of claims 1-34. McDonald (appellant) appeals the primary examiner's rejection of claims 1-34, all the claims in the McDonald patent under reexamination. We affirm. In addition, we enter a new ground of rejection.

**References relied on by the Examiner**

Shaw	3,744,867	July 10, 1973
Marder	4,588,237	May 13, 1986
Roberts	4,894,581	January 16, 1990

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<sup>1</sup> Subsequent to oral argument APJ Gaudette became unavailable to participate in the decision. APJ Tierney was substituted. See, In re Bose Corp., 772 F.2d 866, 869, 227 USPQ 1, 4 (Fed. Cir. 1985).

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McLaughlin et al. (McLaughlin)	5,014,875	May 14, 1991
Cornett et al. (Cornett)	5,053,758	October 1, 1991
Conner et al. (Conner)	5,175,672	December 29, 1992

### Background

The subject matter of the claims is a computerized portable nursing center. Generally, the nursing center is a medical cart including a variety of features helpful to nurses in performing their duties administering to patients. The cart includes drawers for holding patient medications. Access to some of the drawers is controlled by an onboard computer. The nurse enters an access code and patient information using a data entry means such as a keyboard or a touch screen. The computer then unlocks and opens the drawer associated with that particular patient. After the medication is given to the patient, the drawer is closed and the computer generates a patient record. The nursing center also includes a transmitter for sending the record to a remote location such as a hospital computer for retention.

A primary examiner entered eight separate grounds of rejection under 35 U.S.C. § 103(a). Examiner's Answer pages 3 to 4. Each rejection relies on U.S. Patent 5,014,875 to McLaughlin as the "primary" reference. The rejection of each of Claims 1-16 also relies on U.S. Patent 5,175,672 to Connor. Additional references were applied to teach features added by certain dependent claims but not described in either McLaughlin or Connor. The rejection of each of Claims 17-34 patent also relies on U.S. Patent 4,588,237 to Marder and U.S. Patent 4,894,581 to Roberts in addition to McLaughlin. Again, additional patents are relied upon to address dependent claim limitations not disclosed in McLaughlin, Marder or Roberts.

For reasons which will become clear below, only two limitations in the claims are of particular significance in this appeal. Claims 1-16 require that the data entry means be removable from the cart and contain a transmitter. Thus, the invention includes within its

scope a wireless keyboard which can be removed from and used some distance from the cart itself. Claims 17-34 do not require removable data entry means. Rather, these claims require that the cart include a removable partition between adjacent drawers so that the drawers may be reconfigured by the user by removing the partition and adjacent drawers and replacing them with a single large drawer.

At oral argument in response to a question from the bench, counsel stated that the appeal could be decided based solely upon the issues related to the removable data entry means and the removable partition means limitations and it was not necessary for us to consider the other issues. Accordingly, we shall decide this appeal based upon representative Claims 1 and 17. Cf. 37 CFR § 41.37(c)(1)(vii). Claims 1 and 17 which are reproduced below:

1. A portable nursing center comprising:
  - a) a housing having a base and a plurality of wheels attached to the base;
  - b) a plurality of drawers carried by the housing, each of said drawers being movable between a given position and a closed position at least some drawers sized and configured for holding pharmaceutical items which have been prescribed for a specific patient;
  - c) a control unit for locking at least some of said drawers to prevent access thereto, said control unit including data entry means for entry of predetermined access data and other data, wherein the data entry means is removable from the nursing center and contains a transmitter for transmitting entered data to a transmitter/receiver, locking means for locking and unlocking the at least some of said drawers and a processing unit with an associated memory for unlocking at least one drawer in response to entry of access data and recording at least a portion of the access data; and
  - d) a transmitter/receiver connected to the control unit for transmitting selected access data and other data from the portable nursing center to a remote receiver and for receiving data from a remote transmitter, the nursing center being sized and constructed so that when filled with pharmaceuticals and other nursing items, the nursing center can be moved through a nursing area by a single nurse.

17. A portable nursing center comprising:
- a) a housing having a base and a plurality of wheels attached to the base;
  - b) a plurality of drawers carried by the housing, each of said drawers being movable between a given position and a closed position at least some drawers sized and configured for holding pharmaceutical items which have been prescribed for a specific patient;
  - c) at least one removable partition positioned between adjacent drawers, wherein the at least one removable partition is sized and positioned to permit one larger drawer to be substituted for at least two smaller drawers when the removable partition is removed
  - d) a control unit for locking at least some of said drawers to prevent access thereto, said control unit including data entry means for entry of predetermined access data and other data, lock means for locking and unlocking at least some of said drawers and a processing unit with an associated memory for unlocking at least one drawer in response to entry of access data and recording at least a portion of the access data; and
  - e) a transmitter connected to the control unit for transmitting selected access data and other data from the portable nursing center to a remote receiver, the nursing center being sized and constructed so that when filled with pharmaceuticals and other nursing items, the nursing center can be moved through a nursing area by a single nurse.

McLaughlin

McLaughlin teaches a medication dispensing cart for controlled distribution of medications in a hospital or nursing environment. The station includes drawers controlled by a computer and a keyboard for data entry. Entry of an access code unlocks the appropriate drawer for access to a patient's medication. The keyboard is not described as being removable. After the medication is removed the drawer is closed and locked and the computer generates a record of the administration of the medication. The record may be transmitted to a central computer for retention.

Claims 1-16

Representative Claim 1 stands rejected over the combination of the teachings of McLaughlin and Connor. The examiner has found that McLaughlin teaches all of the limitations of Claim 1 except for a removable data entry means wherein the data entry means is removable from the nursing center and contains a transmitter for transmitting entered data to a transmitter/receiver. Final Office action mailed June 29, 2004, p. 3 (“McLaughlin fails to teach that the data entry means is removable from the center, containing a transmitter which communicates with a receiver in the [medicine cart] housing.”). Appellant’s brief agrees, or at least does not assert any other differences between McLaughlin and appellant’s Claim 1. Appeal Brief, p. 7 (“The Examiner has recognized that McLaughlin et al. fails to teach a data entry device that is removable from the nursing center. The Examiner also has recognized that the medication dispenser station does not have a component that contains a transmitter which communicates with a receiver in the nursing center.”).

The examiner relies on Connor as evidence suggesting the use of a removable keyboard having a transmitter. Connor describes a laptop computer system having a display and a detachable keyboard which allows a user to enter data at a location remote from the rest of the computer. Connor, col. 2, ll. 53-57. The removable keyboard includes a transmitter for sending the information to a receiver. Connor, col. 10, ll. 53-59. Connor says the transmission may be wireless including infrared and other electromagnetic radiation “such as microwave, optical or other wireless data linkage . . .” Connor, col. 8, ll. 20-31. Connor also teaches a mechanical link between the display and the keyboard of a conventional laptop is not convenient for the user. “[S]ince the display panel and the keyboard contained within the central section [of a conventional laptop] are mechanically connected, the distance between the keyboard and the display may not be varied to accommodate individual user preference.” Connor, col. 2, ll. 31-35 (bracketed text added).

#### Analogous Art

Appellant argues that McLaughlin and Connor are non-analogous art and therefore the teachings of the references can not be combined. Appeal Brief, pp. 8-9. More

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specifically appellant argues that the computerized nursing cart disclosed by McLaughlin and the laptop computer are used in very different environments. Appeal Brief, p. 9. Thus, appellant argues that McLaughlin's and Connor's teachings can not be combined because they are not from the same field of endeavor.

We disagree.

Two criteria have evolved to aid in determining whether prior art is analogous: (1) whether the art is from the same field of endeavor 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. In re Clay, 966 F.2d 656, 658-59, 23 USPQ2d 1058, 1060 (Fed. Cir. 1992); In re Deminski, 796 F.2d 436, 442, 230 USPQ 313, 315 (Fed. Cir. 1986); In re Wood, 599 F.2d 1032, 1036, 202 USPQ 171, 174 (CCPA 1979).

McLaughlin teaches a computer controlled medical cart which includes conventional computer components including a controller (CPU), memory, display, disk storage and a keyboard for data entry. The computer, including the keyboard for data entry, is a significant and essential component of McLaughlin's cart. Similarly, a computer is a significant and essential component of the claimed nursing station. We find that the significance of a computer to McLaughlin's and appellant's nursing station reasonably places McLaughlin's computerized nursing station into the computer art. In other words, the person ordinarily skilled in computer controlled medical carts would reasonably be expected to be aware of new developments or improvements in computers and the components of computers such as improved displays, keyboards, CPUs, memory and disk storage. Thus, Connor is from the same field of endeavor as McLaughlin and the claimed invention.

Even if McLaughlin and Connor are not from the same field of endeavor, Connor is still analogous prior art under the second criterion for analogous prior art. While not expressly stated in appellant's specification, we find that the problem implicitly addressed by the use of a removable keyboard or other data entry device is how to make data entry

more convenient for the user of appellant's computerized nursing station. Thus, one having ordinary skill in the art addressing the problem of providing a more convenient means for data entry into a computer, would look to the means used in the computer arts generally for solutions. Connor's removable keyboard addresses this problem.

We find that Connor and McLaughlin are analogous art.

Motivation to combine teachings

"In considering motivation in the obviousness analysis, the problem examined is not the specific problem solved by the invention but the general problem that confronted the inventor before the invention was made." In re Kahn, 441 F.3d 977, 988,78 USPQ2d 1329, 1336 (Fed.Cir. 2006). As we stated above, a problem faced by the Appellant was to make the use of the cart and data entry more convenient to the user. The convenience to the user of a removable keyboard that can be used at a varying distance from the rest of the computer is readily apparent from Connor. In view of Connor's teaching, one having ordinary skill in the art would be motivated to replace the fixed keyboard described in McLaughlin with a removable wireless keyboard of the type disclosed by Connor to provide added convenience to the user, that is, to accommodate individual user preferences. The subject matter of Claim 1 would have been prima facie obvious.

Appellant also argues that Connor teaches that the keyboard must be used in close proximity to and within sight of the monitor and therefore must be on the same surface or surfaces located close together. Appeal brief, p. 8. Assuming, without deciding, this to be a correct interpretation of Connor's teachings, appellant has not directed us to a claim limitation which would exclude use of a removable keyboard in "close proximity" to the monitor. All Claim 1 requires is that the data entry device be "removable," i.e., capable of being removed from the cart, and include a transmitter. A removable keyboard and transmitter are clearly taught by Connor.

The rejection of Claims 1-16 is affirmed.

Claims 17-34

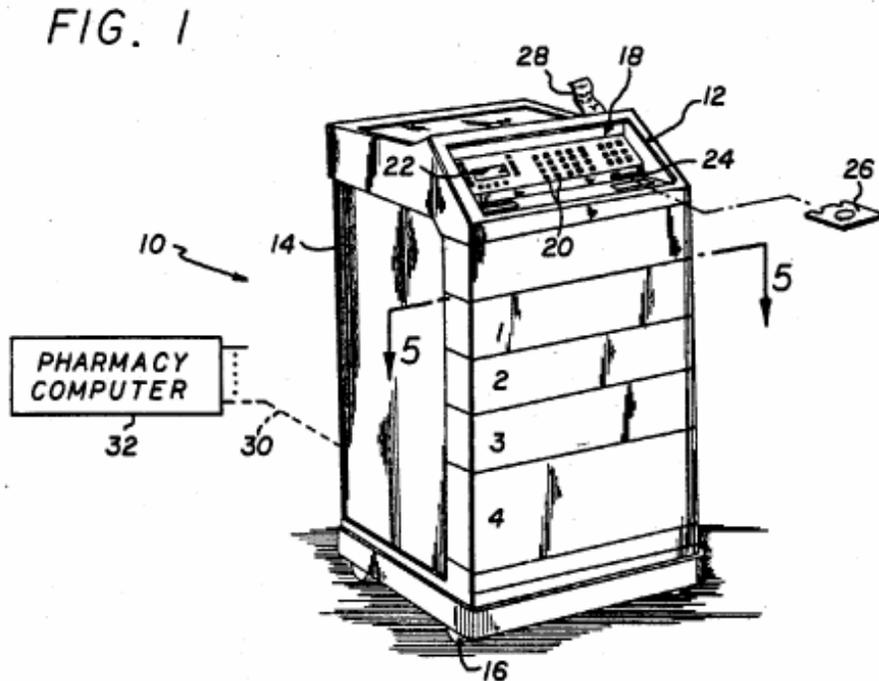
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The examiner's rejection of Claim 17 combines the teachings of McLaughlin with the teachings of Marder and Roberts.

Claim 17 does not require a removable data entry device. Rather, Claim 17 requires a removable partition between drawers so the drawers of the nursing station can be reconfigured by substituting a larger drawer in a space occupied by two or more smaller drawers. The examiner found McLaughlin teaches all the limitations of Claim 17 except the removable partition limitation. Final Office action mailed June 29, 2004, p. 5 ("McLaughlin fails to teach drawers of different sizes/partitions in the housing."). Appellant's appeal brief does not assert that McLaughlin fails to teach any of the other limitations of Claim 17. Appeal Brief, p. 5.

McLaughlin, Marder and Roberts

We agree that McLaughlin teaches all the limitations of Claim 17, except for drawers separated by a removable partition. However, McLaughlin does teach the use of drawers of different sizes and configurations. McLaughlin's Figure 1 shows drawers labeled 1-4, with Drawer 4, being depicted to be about twice the height of each of Drawers 1-3. Thus, McLaughlin discloses the concept of one drawer occupying the same space as two smaller drawers. McLaughlin's Figure 1 is reproduced below:



McLaughlin also teaches that the configuration and number of the drawers may be customized to meet the requirements or desires of the user:

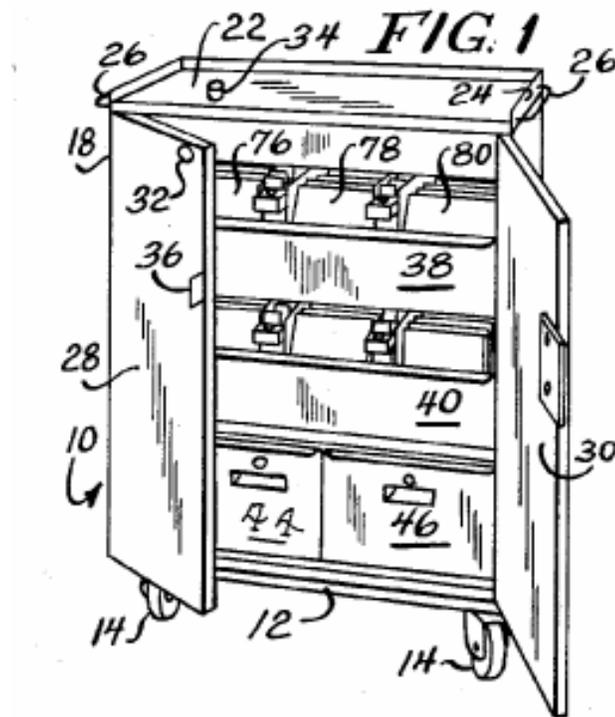
The exemplary drawings illustrate the dispenser station 10 including a stack of four drawers labeled "1" through "4" for ease of identification.

As will be described, these drawers may have the same or different constructions according to the customized requirements and desires of a particular medical facility. Moreover, it will be understood that the number of drawers can be varied as needed to provide the appropriate station inventory capacity.

McLaughlin, col. 5, l. 62 - col. 6, l. 2. McLaughlin also teaches that the individual drawers may be divided into compartments using dividers or partitions. McLaughlin, col. 8, ll. 1-48. In one specific embodiment, a drawer may include a carousel tray (56) having removable

plastic dividers (60) to “permit variation in tray compartment size.” McLaughlin, col. 8, ll. 1-4. Thus, McLaughlin teaches the concept of using removable partitions to allow changing the size of storage compartments for the convenience of the user.

The examiner relies on Marder for the disclosure of a medical cart having different sized drawers including two smaller drawers having the same width as one larger drawer. Marder’s Figures 1 and 2 show a medical cart having drawers 44 and 46 which appear to have the same total width as drawer 40. Marder’s Figure 1 is reproduced below:



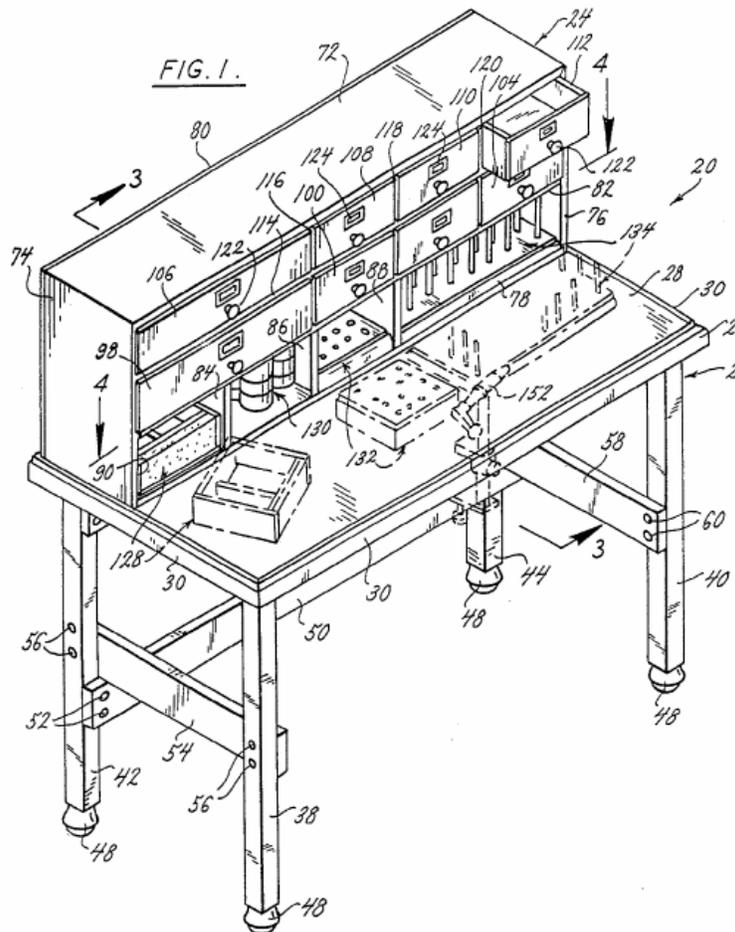
Marder describes these drawers as follows:

The cart is provided with a pair of full width drawers, respectively an upper drawer 38 and a lower drawer 40, mounted on suitable pull-out drawer-slide mechanisms 42. Each of the drawers 38, 40 is only about 2/3 of the height of the space in which it is mounted. Beneath the lower drawer 40 there is a pair of half-width drawers or bins 44

and 46 occupying substantially the entire height of the space available.

Marder, col. 2, ll. 55-61.

The examiner relies on Roberts to teach the use of partitions between drawers. Roberts describes a table and cabinet combination. The cabinet includes a number of drawers which do not extend the full width of the cabinet and separated by partitions. The drawers are shown in Roberts' Figure 1 by numerals 106, 108, 110 and 112. The partitions are shown by numerals 116, 118 and 120. Figure 1 also shows drawers of different sizes, with drawer 106 appearing to take up about the same space as the combination of drawers 108 and 110. Roberts' Figure 1 is reproduced below:



Roberts also teaches that the dimensions of the table, cabinet, and compartments may be varied. Roberts, col. 5, ll. 5-14. We also take official notice that the use of partitions between drawers is ubiquitous and in our view part of the common knowledge of anyone who is familiar with, makes or uses cabinets or carts having drawers. Roberts' table and cabinet are said to be particularly designed for fly tying hobbyists.

#### Analogous Art

Appellant argues that the references are from non-analogous arts. Appeal Brief, p. 13.

With respect to McLaughlin and Marder, this is simply incorrect. Both references relate to carts for dispensing medicine. They are clearly from the same field of endeavor. With respect to Roberts, we hold that Roberts is analogous art since it addresses one of the same problems addressed by the appellant. While appellant's specification is silent as to the problem addressed by the use of partitions, we find that an implicit problem addressed by the McDonald patent is how to support drawers that do not span the full length of the cabinet. One having ordinary skill would look to the general cabinet art to find the solution to this problem. As we indicated the use of partitions to support drawers which do not extend to the full width of the cabinet is well known in the cabinet art. Roberts is an example.

#### Motivation to combine teachings

McLaughlin teaches that both the number and size of drawers and the storage compartments within drawers may be configured to meet the needs of the particular user. McLaughlin, col. 5, l. 62 - col. 6, l. 2. Neither McLaughlin nor Marder appears to disclose partitions between drawers. However, the use of partitions in conjunction with drawers is ubiquitous and well known in the arts related to cabinetry including drawers. The use of such partitions is exemplified by Roberts' cabinet showing partitions between drawers. We find that the use of partitions between drawers would have been a known expedient and alternative for supporting cabinet drawers which do not extend the full length of the cabinet

and would have been obvious. One having ordinary skill in the art would have been motivated to use partitions when the drawers do not extend the full width of the cabinet.

With respect to removable partitions, McLaughlin teaches the use of removable partitions to reconfigure the storage compartments within the drawers. One having ordinary skill in the art would have recognized that removable partitions would be a convenient way of providing user configurable storage space. In light of the teachings that the number and size of cabinet drawers may be configured to meet the needs of the user (McLaughlin, col. 5, l. 62 - col. 6, l. 2; Roberts, col. 5, ll. 5-14. ) one having ordinary skill in the art would have recognized that the use of removable partitions between drawers would facilitate reconfiguring the drawers in light of user needs. The motivation to use a removable partition to accommodate drawers of different sizes comes from the general desire to meet the customization needs of the user. The use of removable partitions to allow customization of the number and size of the drawers, including the use of larger drawer to occupy the same of two or more smaller drawers, would have been obvious. Each of the references shows the use of a single drawer that appears to occupy the same amount of space as two smaller drawers. McLaughlin, Figure 1; Marder, Figure 1 and col. 2, ll. 55-61; Roberts, Figure 1. The design choice of using a single larger drawer rather than two or more smaller drawers is an ability within the ordinary skill of the art. The subject matter of Claim 17 would have been obvious.

Appellant also argues that even if the references are combined, they do not teach the claimed invention in that none of the references teach a removable partition between drawers. In other words, appellant argues that the combined teachings of the references do not constitute a “multi-reference anticipation” of the reference. By “multi-reference anticipation” we mean a combination of references expressly teaching every claim limitation.

The statutory standard of § 103(a) precludes a patent where the differences between the claimed subject matter and the prior invention would have been obvious to a person having ordinary skill in the art. That person is hypothetical and is presumed to have

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knowledge of all the pertinent prior art in the field of the invention. Custom Accessories Inc. v. Jeffrey-Allan Industries Inc., 807 F.2d 955, 962, 1 USPQ2d 1196, 1201 (Fed. Cir. 1986)); The Standard Oil Company v. American Cyanamid Company, 774 F.2d 448, 454, 227 USPQ 293, 297 (Fed. Cir. 1985). The statutory obviousness standard does not require express teaching of every difference. Only that the differences “are such that the invention as a whole would have been obvious . . . .” 35 U.S.C. § 103(a). The relevant question is whether the prior art would have suggested that the hypothetical person do what the appellant has done. McLaughlin’s express teaching of the desirability of configuring drawers to meet the user needs, the well known use of partitions between drawers and the disclosure of removable partitions within drawers would have reasonably suggested to the person having ordinary skill in the art the use of removable partitions between drawers to allow customization or drawer sizes to meet user needs.

The rejection of Claims 17-34 is affirmed.

#### New Ground of Rejection

We enter the following new ground of rejection: Claim 17 is rejected under 35 U.S.C. § 103(a) as unpatentable over McLaughlin combined with U.S. Patent 4,114,965 to Oye et al<sup>2</sup>. The sole alleged difference between McLaughlin and the subject matter of Claim 17 is the limitation requiring a removable partition between drawers allowing customization of the drawer configuration such as by substituting a single large drawer for two or more smaller drawers. Oye relates to medical dispensing cart having numerous medicine drawers or bins 38. The drawers may be of various sizes. The drawers are arranged on removable partitions (racks 56). The partitions are removable to permit the use of different sized drawers. Oye states (col. 3, ll. 44-58):

To accommodate various size medication drawers or bins 38, the compartment is separated into three smaller compartments by rails 54

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<sup>2</sup> In making this rejection we have not evaluated its applicability to any other claims. We leave such consideration to the examiner in the event of further prosecution.

which support cassettes or racks 56 containing the medicine drawers 38. These racks 56 are removable and provide for various size medicine storage drawers 38. This permits the cart to be arranged in whichever manner is the most convenient for the particular user. For example, as shown in FIG. 3, large drawers or bins 38 are provided in the bottom rack which may be for less often used or larger containers.

The removable racks 56 meet the limitation of claim 17 requiring “at least one removable partition positioned between adjacent drawers . . . .” One having ordinary skill in the art would have recognized that Oye’s drawer and removable rack configuration would be beneficial in McLaughlin’s medicine cart to facilitate McLaughlin’s teaching that the “number of drawers can be varied as needed to provide the appropriate station inventory capacity.” McLaughlin, col. 5, l. 67 - col. 6, l. 2. One having ordinary skill in the art would have been motivated to use the removable racks in conjunction with McLaughlin’s medicine cart to facilitate customization of the number of drawers. The subject matter of Claim 17 would have been obvious to one having ordinary skill in the art.

**Conclusion**

The decision of the examiner rejecting Claims 1-34 is affirmed.

A new ground of rejection is entered as to Claim 17.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

**AFFIRMED**

/Richard E. Schafer/  
RICHARD E. SCHAFER )  
Administrative Patent Judge )  
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 )  
/Romulo H. Delmendo/ )  
ROMULO H. DELMENDO )

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Administrative Patent Judge            )

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