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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/421,624	06/01/2006	John Thomas Aylward	034976/306733	2865

826 7590 01/13/2012

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EXAMINER	
NIESZ, JASON KAROL	
ART UNIT	PAPER NUMBER
3751	

MAIL DATE	DELIVERY MODE
01/13/2012	PAPER

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHN THOMAS AYLWARD

Appeal 2010-000369
Application 11/421,624
Technology Center 3700

Before: JENNIFER D. BAHR, STEVEN D.A. McCARTHY, and STEFAN STAICOVICI, *Administrative Patent Judges*.

BAHR, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

John Thomas Aylward (Appellant) appeals under 35 U.S.C. § 134 from the Examiner's rejection of claims 1-19 under 35 U.S.C. § 103(a) as unpatentable over Aylward (US 6,505,460 B2, iss. Jan. 14, 2003) and Pearson (6,561,377 B1, iss. May 13, 2003). We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

THE INVENTION

The claims are directed to "an apparatus and associated methods for handling pills with a vacuum assembly." Spec. para. [0001]. Claim 1, reproduced below, is illustrative of the claimed subject matter.

1. A pill handling apparatus comprising:

> a plurality of rotary slats, each rotary slat being cylindrically-configured and the rotary slats being axially aligned such that each slat is rotatable about a first axis, each of said rotary slats having an outer circumferential surface extending parallel to the first axis, the outer circumferential surface defining a plurality of receptacles for receiving pills; and
>
> a vacuum assembly disposed in fluid communication with each of said rotary slats and configured to draw air into at least a portion of said receptacles to urge pills to be received by said portion of said receptacles.

OPINION

The Examiner found that Aylward discloses all features of independent claims 1 and 11, with the exception of a vacuum assembly or a step of drawing air into at least a portion of the receptacles to urge pills to be received by the portion of receptacles. Ans. 3, 5. Appellant does not appear to contest this finding.

The Examiner found that Pearson discloses a pill handling apparatus comprising a vacuum assembly in communication with a plurality of receptacles for receiving pills, and reasoned that it would have been obvious to modify the Aylward apparatus and method "by adding the vacuum system from Pearson, in order to more securely retain the pills against the receptacles." Ans. 3. Appellant argues that the modification proposed by the Examiner would not have been obvious for the following reasons:

(1) Aylward and Pearson, whether separately or in combination, "**do not teach, suggest, provide motivation for, or otherwise render predictable**" what Appellant purports to be "a relatively complex process of drawing air through pill receptacles, **defined by the outer circumferential surface of cylindrically-configured rotary slats**." App. Br. 5, 10.

(2) The Examiner disregards the difficulty presented by attempting to combine the relatively simple vacuum system of Pearson with the complex apparatus of Aylward. App. Br. 5-6, 11.

(3) Aylward provides a relatively simple solution (cover 80) to appropriately retain the pills in the respective receptacles, and thus does not "teach, suggest, provide motivation for, or otherwise render predictable the substitution of a relatively complex vacuum system for the relatively simple guard plate solution already in place." App. Br. 6, 11.

(4) Aylward and Pearson teach away from the proposed combination, because Aylward already describes a mechanism for retaining the pills (the cover), and a redundant means for doing so would be unnecessary. App. Br. 15, 16.

(5) Aylward's provision of a positive air pressure system to eject the pills suggests that the pills are appropriately retained without the presence of a vacuum system. App. Br. 6, 11.

Appellant additionally argues, with respect to claims 2 and 12, that "the increased complexity of having a plurality of independently rotatable slats incorporating a vacuum assembly is not rendered predictable or obvious" from the combination of Aylward and Pearson. App. Br. 7, 13.

Appellant reiterates, with respect to claims 8 and 19, that it would not have been obvious to add a complex vacuum system to Aylward's apparatus, given the presence of Aylward's ejection system. App. Br. 8, 13-14.

For the reasons articulated by the Examiner (Ans. 7:14 to 9:7), Appellant's arguments are not persuasive of error in the Examiner's rejection.

Appellant's arguments that Aylward and Pearson provide no teaching, suggestion, or motivation for the proposed modification are not persuasive. As Appellant acknowledges, while the demonstration of a teaching, suggestion, or motivation (the test established by the Court of Customs and Patent Appeals) to combine known elements in order to show that the combination is obvious may be "a helpful insight," it cannot be used as a rigid and mandatory formula. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418-19 (2007). Rejections on obviousness grounds must be supported by "some articulated reasoning with some rational underpinning" to combine the known elements in the manner required in the claim at issue. *Id.* at 418 (*quoting In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)). However, "the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences

and creative steps that a person of ordinary skill in the art would employ." *KSR*, 550 U.S. at 418. The Examiner articulated a reason for adding the vacuum system from Pearson to the apparatus of Aylward, (i.e., to more securely retain the pills against the receptacles). As more fully discussed below, this articulated reasoning has rational underpinnings.

We appreciate that Pearson applies suction to adhere pills to apertures in a front wall of a rotary vacuum drum, rather than to receptacles formed in the circumferential perimeter surface of rotary slats. However, it is not apparent, and Appellant has not adequately explained, why the application of suction to a different wall of a rotating drum (or slat) would be uniquely challenging or unpredictable to a person having ordinary skill in the art. As noted by the Examiner (Ans. 8), the issue of the alleged complexity of selectively providing fluid communication between a fluid pressure source and respective receptacles on the outer circumferential surface of a rotary slat, depending on the position of the receptacle relative to the capture position and the release position, has been addressed by Aylward. Merely to apply those same principles to selectively providing fluid communication to a vacuum source, as distinguished from a positive pressure source, involves only routine skill. "A person of ordinary skill is also a person of ordinary creativity, not an automaton." *KSR*, 550 U.S. at 421.

We do not agree with Appellant that Aylward's disclosure of a cover 80 that assists in maintaining the pills in place during travel to the release position (col. 7, ll. 50-52) would have discouraged a person of ordinary skill in the art from employing suction to more securely retain the pills against the receptacles, as proposed by the Examiner. Prior art does not teach away from claimed subject matter merely by disclosing a different solution to a

similar problem unless the prior art also criticizes, discredits or otherwise discourages the solution claimed. *See In re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004). As the Examiner pointed out (Ans. 8-9), Aylward does not criticize, discredit, or otherwise discourage the use of suction to more securely retain the pills against the receptacles. Further, the Examiner explains why a person of ordinary skill in the art would be prompted to employ suction to help retain the pills against the receptacles, either in addition to or in place of Aylward's cover. Ans. 8. These explanations, which we adopt, convince us that the Examiner's articulated reason for the proposed modification has rational underpinnings.

We also do not agree with Appellant that Aylward's disclosure of a positive pressure eject mechanism suggests that Aylward's apparatus would not benefit from a vacuum system to more securely retain the pills in the receptacles. As pointed out by the Examiner (Ans. 8), Aylward's disclosure of such an eject mechanism indicates only a desire on the part of Aylward to ensure that pills are released from the receptacles. We find no inconsistency in the provision of both a vacuum system to help securely retain the pills in their receptacles during their travel from the capture position to the release position and a positive pressure eject mechanism to ensure that the pills are released from the receptacles at the release position.

Thus, Appellant has not persuaded us that the Examiner erred in concluding that Aylward and Pearson render obvious the subject matter of independent claims 1 and 11. We sustain the rejection of claims 1 and 11. Appellant does not present any separate arguments for the patentability of dependent claims 3-7, 9, 10, and 13-18 apart from independent claims 1 and

11. Thus, claims 3-7, 9, and 10 fall with claim 1, and claims 13-18 fall with claim 11. *See* 37 C.F.R. § 41.37(c)(1)(vii).

We also sustain the rejection of claims 2 and 12. As discussed above, Aylward addresses the issue of the alleged complexity of selectively providing fluid communication between a fluid pressure source and respective receptacles on the outer circumferential surface of a rotary slat, depending on the position of the receptacle relative to the capture position and the release position. Moreover, Aylward addresses this issue with independently driven rotary slats. Abst.; col. 2, ll. 42-43; col. 5, ll. 20-22. Accordingly, Appellant's argument directed to the allegedly increased complexity of having a plurality of independently rotatable slats incorporating a vacuum assembly is not convincing.

We also sustain the rejection of claims 8 and 19. As discussed above, we find no inconsistency in the provision of both a vacuum system to help securely retain the pills in their receptacles during their travel from the capture position to the release position and a positive pressure eject mechanism to ensure that the pills are released from the receptacles at the release position.

DECISION

For the above reasons, the Examiner's decision to reject claims 1-19 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

nlk

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Appeal No: 2010-000369
Application: 11/421,624
Appellant: John Thomas Aylward

Board of Patent Appeals and Interferences
Docketing Notice

Application 11/421,624 was received from the Technology Center at the Board on October 13, 2009 and has been assigned Appeal No: 2010-000369.

A review of the file indicates that the following documents have been filed by appellant:

Appeal Brief filed on:	May 27, 2009
Reply Brief filed on:	NONE
Request for Hearing filed on:	NONE

In all future communications regarding this appeal, please include both the application number and the appeal number.

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By order of the Board of Patent Appeals and Interferences.

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 11/421,624
Filing Date: June 01, 2006
Appellant(s): AYLWARD, JOHN THOMAS

Scott C. Mayhew
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 05/27/2009 appealing from the Office action mailed 10/15/2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,505,460	Aylward	1-2003
6,561,377	Pearson	5-2003

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, 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. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aylward (US Patent 6,505,460 B2) in view of Pearson et al. (US Patent 6,561,377 B1).

In Re claim 1 with reference to Figure 1 Aylward discloses a pill handling apparatus comprising a plurality of cylindrically configured and axially aligned rotary slats (15) (Column 4, lines 41-42). Said slats comprising an outer circumferential surface defining a plurality of receptacles (18) (Column 7, lines 3-5) for receiving pills.

Aylward doesn't disclose a vacuum assembly.

With reference to Figure 2 Pearson discloses a pill handling apparatus comprising a vacuum assembly in communication with a series of receptacles (14) for receiving pills (Column 5, lines 52-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Aylward apparatus by adding the vacuum system from Pearson, in order to more securely retain the pills against the receptacles.

In Re claim 2 Aylward discloses a pill handling apparatus wherein each of a plurality of rotary slats is independently rotatable (Column 8, lines 10-16).

In Re claim 3 with reference to Figure 8 Aylward discloses a pill handling machine wherein the outer surface of each of said slats defines a contour sloped toward said receptacles (The pill 11 can be seen occupying said sloped surface). The examiner notes that the feature in Aylward described as the receptacle (Figure 1, 18) comprises the structure of both the receptacle and the sloped surface of the instant application.

In Re claim 4 Aylward discloses a circumferential groove (Column 6, lines 40-43). The examiner notes that a cross section described as having a recessed contour with higher portions to either side describes a circumferential groove.

In Re claim 5 with reference to Figure 1 Aylward discloses a conveyor system (30) (Column 7, line 61) configured to move a plurality of open containers along a predetermined path of travel and position each of said containers adjacent a respective rotary slat for receiving pills therefrom (Column 9, lines 55-58).

In Re claim 6 Aylward discloses all the limitations but doesn't disclose a plurality of optical devices. With reference to Figure 2 Pearson discloses an optical device (37) for detecting pills received by the receptacles (Column 4, lines 33-45). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Aylward apparatus by adding an optical device, as taught by Pearson, to each slat, in order to identify the pills as they are dispensed.

In Re claim 8 the examiner notes that the combined apparatus of Aylward in view of Pierson disclosed above in Re claim 1 necessarily contains the structure listed in claim 7: The combination of the vacuum assembly from Pearson with the pressurized air source from Aylward necessarily indicates a device wherein said vacuum assembly

draws air into said receptacles for receiving pills during the portion of the rotation when the pills are to be retained on the slat and releases the vacuum pressure from said receptacles when the pressurized air supply is connected to urge said pills to release.

In Re claim 8 Aylward discloses a pressurized air supply configured to expel air from a receptacle to urge pills to be dispensed from said receptacle. Aylward doesn't disclose a blower assembly. Blower assemblies were commonly known in the art as a cheap, readily obtainable supply of pressurized air. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a blower assembly as said pressurized air supply, because of the motivations listed above of economy and availability.

In Re claim 9 with reference to Figure 1 Aylward discloses a reservoir (12) (Column 4, line 41).

In Re claim 10 Aylward discloses a controller designed to control the rotation of said slats at dissimilar speeds (Column 6, lines 44-52) (Column 8, lines 10-16). The examiner notes that the act of advancing only one rotary slat for the purpose of completing the filling of an under filled container comprises rotating said rotary slats at dissimilar speeds.

The Aylward in view of Pearson apparatus applied to claim 1 performs the method claimed in Claim 11 during ordinary use and operation.

The Aylward in view of Pearson apparatus applied to claim 2 performs the method claimed in Claim 12 during ordinary use and operation.

The Aylward in view of Pearson apparatus applied to claim 10 performs the method claimed in Claim 13 during ordinary use and operation.

The Aylward in view of Pearson apparatus applied to claim 3 performs the method claimed in Claim 14 during ordinary use and operation.

The Aylward in view of Pearson apparatus applied to claim 4 performs the method claimed in Claim 15 during ordinary use and operation.

The Aylward in view of Pearson apparatus applied to claim 5 performs the method claimed in Claim 16 during ordinary use and operation.

The Aylward in view of Pearson apparatus applied to claim 6 performs the method claimed in Claim 17 during ordinary use and operation.

The Aylward in view of Pearson apparatus applied to claim 7 performs the method claimed in Claim 18 during ordinary use and operation.

The Aylward in view of Pearson apparatus applied to claim 8 performs the method claimed in Claim 19 during ordinary use and operation.

(10) Response to Argument

Applicant argues the following:

1. The receptacles in the Pearson reference were not located on an outer circumferential surface and that the combined Aylward in view of Pearson reference does not teach the process of drawing air located through receptacles located thusly (Page 5, lines 16-25) .

2. One of ordinary skill in the art would not know from the Pearson reference how to apply a vacuum apparatus to the Aylward apparatus because the pill receptacles are

located on the outer circumferential surface of a slat rather than on its face (Page 6, lines 5-25).

3. One of ordinary skill in the art would not be motivated to combine the vacuum device from Pearson with the Aylward pill dispenser because the Aylward device already has a guard plate which retains pills in place. Furthermore the presence of a pressurized air supply to urge the pills from the receptacles of the Aylward apparatus suggests that the device functions without a vacuum system (Page 6, lines 5-25 and Page 7, lines 5-17).

4. Because the Aylward pill dispenser includes a structure for retaining pills, the Aylward reference teaches away from the relied upon Aylward in view of Pearson combination (Page 15, lines 6-30 and Page 16, lines 1-16).

5. The complexity of the proposed Aylward in view of Pearson combination indicates impermissible hindsight (Page 16, lines 24-30 and Page 17, lines 1-7)

In Re arguments 1 and 2 the Pearson reference teaches the application of a vacuum to the pill handling apertures in a rotating drum. One of ordinary skill in the art could easily apply this teaching to devices having receptacles in other locations. Vacuum systems and their applications represent established technology would be well known to those of ordinary skill in the art. Furthermore, the receptacles of the unmodified Aylward device comprise passages which are used selectively by a pressurized gas source to eject pills from receptacles. One of ordinary skill in the art would know that a vacuum device could make use of those passages when said pressurized gas source was disconnected, in order to better retain the pills in the

receptacles. The issue of the alleged complexity has already been addressed in the Aylward reference which uses a pressurized air source to selectively apply pressurized air to receptacles in a number of independently rotating slats. One of ordinary skill in the art would be able to make use of the Aylward system to selectively apply vacuum to said receptacles during the portion of rotation when the pill is retained.

In Re argument 3 the advantage of more securely retaining the pills in the receptacles provides a motivation for combination whether or not the guard plate is retained. In the instance where the vacuum apparatus is used instead of a guard plate the user no longer needs to adjust said guard plate for different sizes of pills. The user also has easier access to the portion of the apparatus which contacts said pills, facilitating cleaning and repair. In the instance where the guard is retained, the vacuum device more securely retains the pill in the socket allowing it to be more precisely dispensed. Such precision dispensing prevents a pill from possibly being lodged between the guard and any sort of funnel device used to direct the pill into a container. Furthermore, it potentially altogether eliminates the need for said funnel device, reducing the room between the slat and the container and saving valuable space in the pill packaging facility. In Re the specific argument about the pressurized gas source which ejects the pills from the receptacles the examiner notes that the presence of such a system only indicates a desire on the part of Aylward to avoid having a pill jamming in a receptacle and not necessarily that all of said pills require ejecting.

In Re argument 4 the Aylward reference does not explicitly indicate the undesirability of a vacuum device and so does not teach away from the proposed

Aylward in view of Pearson combination. Furthermore, the combination of the Pearson Vacuum system with the Aylward apparatus does not destroy a function of the Aylward apparatus as asserted by applicant on page 15: The Aylward apparatus makes selective use of air passages to expel pills from the pill receptacle, one of ordinary skill in the art would be able to attach a vacuum source to said pill receptacles during the portion of rotation when the pressurized air is not attached to the air passages, and so preserve the expelling function of the apparatus.

In Re argument 5 in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Other arguments made by Applicant are believed to be restatements of those arguments addressed above.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/J. K. N./

06/16/2009

/Jason K Niesz/

Examiner, Art Unit 3751

Conferees:

/Gregory L. Huson/
Supervisory Patent Examiner, Art Unit 3751

/Thomas E. Denion/
Supervisory Patent Examiner, Art Unit 3748