

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 28

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HENRY JOHN WEIR

Appeal No. 2002-2047
Application No. 09/348,400

HEARD: April 8, 2003

Before ABRAMS, FRANKFORT, and McQUADE, Administrative Patent Judges.
ABRAMS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1-5, 22-24, 28-30, 54, 77-84, 90, 96, 113 and 114. Claims 6-21, 25-27, 31-53, 55-76, 85-89, 91-95 and 97-112 have been withdrawn from consideration as being directed to a non-elected invention.

We AFFIRM-IN-PART AND ENTER A NEW REJECTION UNDER
37 CFR 1.196(b).

BACKGROUND

The appellant's invention relates to a method and apparatus for separating laundry. An understanding of the invention can be derived from a reading of exemplary claims 1 and 28, which have been reproduced below.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Rosenfeld	4,036,365	Jul. 19, 1977
Robin <u>et al.</u> (Robin)	5,168,645	Dec. 8, 1992
Heinz <u>et al.</u> (Heinz)	6,089,810	Jul. 18, 2000 (filed Mar. 6, 1998)
Umeda (Japanese Kokai)	56-33315	Apr. 3, 1981 ¹

Claims 1-5, 22-24, 28-30, 54, 81-84, 113 and 114 stand rejected under 35 U.S.C. § 103 as being unpatentable over Robin in view of Umeda and Heinz.

Claims 77-80, 90 and 96 stand rejected under 35 U.S.C. § 103 as being unpatentable over Robin in view of Umeda, Heinz and Rosenfeld.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejections, we make reference to the Answer (Paper No. 21) for the examiner's complete reasoning in support of the rejections, and to the Brief (Paper No. 20) and Reply Brief (Paper No. 23) for the appellant's arguments thereagainst.

¹Our understanding of this foreign language document was obtained from a PTO translation, a copy of which is enclosed.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by the appellant and the examiner. As a consequence of our review, we make the determinations which follow.

Claims 1 and 28

1. Laundry separating apparatus for separating an article of laundry from a bundle of laundry articles, the apparatus comprising:
 - a frame;
 - a grip device mounted for guided movement towards and away from a bundle of laundry;
 - a wheeled laundry truck in which the laundry articles are, in use, located;
 - drive means for moving said grip device towards and away from said laundry; and
 - moving means associated with the wheeled laundry truck for causing the truck to move relative to the frame beneath the grip device during the operation of the apparatus, the moving means operable to release the wheeled laundry truck.

28. A laundry separation method for positioning a laundry truck containing at least one laundry article for gripping, the method comprising the steps of:
 - (a) placing the at least one laundry article in the laundry truck;

(b) placing the laundry truck from a first position spaced away from a gripping device to a second position adjacent the gripping device; and

(c) moving the laundry truck relative to movement of the gripping device.

The Rejections Based Upon Robin, Umeda and Heinz

The examiner has concluded that the subject matter recited in independent apparatus claims 1, 22, 54, 81 and 82, independent method claim 28, and dependent claims 2-5, 23, 24, 29, 30, 83, 84, 113 and 114, would have been obvious² in view of the combined teachings of Robin, Umeda and Heinz. It is the examiner's view that Robin discloses all of the subject matter recited in these claims except for the means to move the cart and the nip conveyor. However, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to provide means to move the cart in the Robin system in view of the teachings of Umeda and the nip conveyor in view of Heinz, with Heinz also cited by the examiner as providing the suggestion to add the Umeda cart to the Robin system.

²The test for obviousness is what the combined teachings of the prior art would have suggested to one of ordinary skill in the art. See, for example, In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). In establishing a prima facie case of obviousness, it is incumbent upon the examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. See Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Int. 1985). To this end, the requisite motivation must stem from some teaching, suggestion or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from the appellant's disclosure. See, for example, Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1052, 5 USPQ2d 1434, 1439 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988).

Looking first to claim 1, Robin is directed to a method and apparatus for separating laundry in that it removes a flat sheet from a bin, grasps two adjacent corners of the sheet, shakes it out, and then conveys it for further treatment, such as drying and pressing. Robin discloses a frame (2), a wheeled laundry truck (1) within which the sheets are located, a suction device (4) for removing sheets from the wheeled laundry truck, and drive means (3) for moving the suction device towards and away from the sheets in the wheeled laundry truck. Robin does not disclose or teach “moving means associated with the wheeled laundry truck for causing the truck to move relative to the frame beneath the grip device during the operation of the apparatus, the moving means operable to release the wheeled laundry truck,” as is recited in claim 1.

Umeda is directed to an apparatus for loading box-like containers (C) containing a substance such as rice from a roller conveyor (B) onto a wheeled truck (E). Arms (24) are provided to hold the truck adjacent to the end of the conveyor, and to move it laterally after each box is loaded to allow a pusher mechanism (20-22) to sequentially load a plurality of boxes onto the truck next to one another in response to a control device. The loading mechanism can be moved vertically so that several layers of boxes can be loaded, and upon completion of the loading operation the truck is released from the arms (translation, pages 4 and 5). There is no disclosure of a mechanism for unloading boxes from the truck.

As is best shown in Figure 7 and explained in column 9, Heinz discloses an apparatus for removing items of laundry from a container (51) that is mounted on a frame (52) that is vertically and horizontally movable beneath a gripper (23). The container is “moved to and fro” and “up and down” (column 9, lines 35-40) by the frame, in order to allow the gripper to reach into any part of the container so that all laundry items can be removed therefrom. Heinz further discloses a pivotable conveyor arm (30) which carries on its distal end a roller (28) that can mate with a second roller (26) to form a nip that closes on a laundry article that has been picked up by the gripper and moves the article laterally and deposits it on another conveyor 33 (Figure 3).

The appellant has argued that Umeda is non-analogous art and therefore cannot properly be combined with Robin. The test for analogous art is first whether the art is within the field of the inventor's endeavor and, if not, whether it is reasonably pertinent to the problem with which the inventor was involved. See In re Wood, 599 F.2d 1032, 1036, 202 USPQ 171, 174 (CCPA 1979). A reference is reasonably pertinent if, even though it may be in a different field of endeavor, it logically would have commended itself to an inventor's attention in considering his problem because of the matter with which it deals. See In re Clay, 966 F.2d 656, 659, 23 USPQ2d 1058, 1061 (Fed. Cir. 1992). Umeda clearly is not directed to laundry separating devices, and therefore is not in the field of the appellant's endeavors. Since Umeda is directed to loading boxes on a truck, we share the appellant's view that it would not have commended itself to the

attention of an inventor who is attempting to solve problems related to removing laundry articles from a truck. This being the case, it is our conclusion that Umeda fails to meet either of the tests, and therefore this rejection is defective on the basis that Umeda does not constitute analogous art.

However, even considering, arguendo, Umeda to be analogous art, we do not agree with the examiner's theory that Heinz would have suggested to one of ordinary skill in the art that the Robin apparatus be provided with the wheeled truck moving means disclosed by Umeda in order to allow all of the articles in the truck to be accessed for removal by the Robin suction device. In arriving at this conclusion, we first note that Robin evidences no concern for the suction cup being unable to access all of sheets in the truck perhaps because, as is shown in Figure 4 and explained in column 2, the sheets are in an essentially flat orientation in the truck, and the necessity to search around in the truck in order to access the sheets does not exist. Even if there were such a problem in the Robin system, it is our view that the solution suggested to the artisan by Heinz would be to mount the laundry truck in a frame that can be moved "to and fro . . . [and] up and down," which is the manner in which Heinz solves this problem. We fail to perceive any teaching, suggestion or incentive in Heinz which would have led one of ordinary skill in the art to modify the Robin system by providing a means for moving gripping the truck and causing it to move horizontally, as is disclosed in the Umeda loading system, if for no other reason than this one-dimensional

movement would not allow the suction device to access the entire floor area of the truck. From our perspective, the only suggestion for modifying Robin in the manner proposed by the examiner is found in the hindsight afforded on who first viewed the appellant's disclosure.

For the reasons set forth above, Robin, Umeda and Heinz fail to establish a prima facie case of obviousness with regard to the subject matter recited in independent claim 1, and we will not sustain the rejection of this claim or of claims 2-5, which depend therefrom.

Independent claim 22 requires that there be a drive operatively connected with the laundry truck to moveably position the truck with respect to the frame, and also stands rejected on the basis of Robin, Umeda and Heinz. On the basis of the reasoning applied above with regard to claim 1, we also will not sustain the rejection of claim 22 or of claims 23, 24 and 113, which depend therefrom and are rejected on the same grounds.

We shall, however, sustain the examiner's rejection of independent method claim 28, for in our view all of the steps recited in this claim are taught by Robin, and anticipation is the epitome of obviousness. See In re Fracalossi, 681 F.2d 792, 215 USPQ 569 (CCPA 1982). However, since the reasoning we advance for sustaining this

rejection differs from that set out by the examiner, we designate the rejection to be a new rejection made under 37 CFR 1.196(b).³

Robin discloses a laundry separation system in which the laundry to be separated is in a wheeled truck, with the apparatus being disclosed as being particularly suitable for operation “after the washing phase and before the finishing phase” (column 1, lines 21 and 22). In our view, it is clear from this recitation, and the presence of wheels on the truck, that this reference teaches that the laundry articles are placed in the truck at a first location, where they had been washed, and then are moved in the truck to a second location, where they are removed from the truck and further acted upon by the disclosed apparatus. This being the case, the step in claim 28 of “placing the laundry truck from a first position spaced away from a gripping device to a second position adjacent the gripping device” is part of the Robin teachings. As for the step of “moving the laundry truck relative to movement of the gripping device,” it is our view that the movement of the Robins laundry truck also is “relative to movement of the gripping device” in that the movement of the gripping device is vertical and the movement of the truck is horizontal.

Claim 29 adds to claim 28 the step of releasably clamping the truck to a movable carriage mounted to the frame, with the gripping device being operatively connected to

³Since Robin discloses all of the claimed subject matter, the fact that Umeda is not analogous art is of no consequence.

the frame, and claim 30 adds to claim 28 moving the truck long at least one rail. It is our opinion that this rejection fails for the same reasons as were advanced above in our action on the like rejection of claim 1. Likewise, we will not sustain the rejection of dependent claim 114, which adds to claim 28 the requirement that movement of the truck be “both forward and reverse relative to the gripping device in the second [adjacent] position,” which we do not find to be rendered obvious by the applied references.

Independent claim 54 includes a movable carriage and means for connecting the truck to the carriage and moving the carriage, features for which the examiner relied upon Umeda. Since we have determined that Umeda is non-analogous art, the rejection cannot be sustained on that basis. We also point out, however, that the claim further requires “a conveyer comprising a shaft pivotally connected with the frame,” “a nip formed with the conveyor,” and “means for oscillating the conveyor and the nip about the shaft” (emphasis added). The common applicable definition of a “nip” is the region of a squeezing or crushing device where the rolls or jaws are closest together.⁴ This being the case, while a nip is created when the pivotal action of Heinz’ conveyor 25 causes roller 27 to be placed in juxtaposition with roller 26, it is only conveyor 25 and not the conveyor and the nip that oscillates about a shaft, as is required by this claim. Thus, contrary to the examiner’s opinion, Heinz does not teach this feature.

⁴See, for example, Webster’s New Collegiate Dictionary, 1976, page 776.

Independent claim 81 does not recite the movable truck, but sets forth “a nip roller mounted adjacent the conveyor to define therebetween a nip,” and “transfer means for transferring a portion of said article of laundry into said nip.” The transfer means is disclosed by the appellant as being an air jet (14) that blows the suspended laundry article into the nip (Figures 1 and 8-10). In response to the appellant’s argument regarding the absence of this structure in the references, the examiner has merely pointed out that Robin “discloses transfer means #10 and #11 for feeding the laundry” (Answer, page 7), and we note that these items comprise, respectively, a suction pipe and a blower nozzle. The examiner has not explained how the blower nozzle and the suction pipe “transfer” the laundry item “into” a nip, as is required by this claim, and it appears to us that they merely function to hold, rather than transfer, the laundry item beneath suction device 4 until gripper 5 comes along the track to grip it, whereupon the suction and blower are inactivated to allow the laundry item to be taken from their grasp (column 5, line 19 et seq.). Moreover, the appellant has asserted that this limitation is a “means-plus-function” structure under the sixth paragraph of Section 112 (Brief, page 18, Reply brief, page 7), but the examiner has neither considered it in this fashion,⁵ nor replied to the appellant’s argument that it should be so considered. We therefore are of the view that the evidence adduced by the examiner does not

⁵In order to meet a means-plus-function limitation, the prior art must perform the identical function recited in the means limitation, and perform that function using the structure disclosed in the appellant’s specification or an equivalent structure. See Valmont Indus. Inc. v. Reinke Mfg. Co., 983 F.2d 1039, 1042, 25 USPQ2d 1451, 1454 (Fed. Cir 1993).

establish a prima facie case of obviousness with regard to the subject matter of claim 81, and we will not sustain the rejection.

Independent claim 82 includes a truck and means for moving it, and therefore suffers from the problem of Umeda being non-analogous art. In addition, however, claim 82 requires the transfer means discussed above with regard to claim 81. For the reasons we set forth in refusing to sustain the rejections of claim 1 and 81, we also will not sustain the rejection of claim 82 or, it follows, of claims 83 and 84, which depend from claim 82 and stand rejected on the same grounds.

The Rejection Based Upon Robin, Umeda, Heinz and Rosenfeld

This rejection is directed to independent claims 77, 78, 90 and 96, and dependent claims 79 and 80. It is the examiner's view in this rejection that all of the subject matter recited would have been obvious in view of the combined teachings of Robin, Umeda and Heinz, except for the requirement that the gripping device have first and second pairs of gripping jaws. However, the examiner has taken the position that this structure is taught by Rosenfeld, and it would have been obvious to one of ordinary skill in the art to replace the suction device for removing laundry articles disclosed in Robin with the Rosenfeld device. As was the case with the other rejection, our conclusion that Umeda is non-analogous art causes this rejection also to be fatally defective.

However, we further point out that the examiner's contention that Rosenfeld discloses two sets of grippers is in error, and therefore even if all of the references were properly combinable the result would not be the invention recited in these claims.

Rosenfeld discloses a linen sorter provided with grippers 50 equipped with gripper arms (Figures 2 and 3, unnumbered) for grasping individual pieces of linen and removing them from a hopper. "Pins" 74 and 76 are mounted within the operating arcs of the gripper arms, and pin 76 is pivotable. As a suction device removes linen from the hopper, the linen contacts pins 74 and 76, whose function is to sense whether one piece (desired), or more than one piece (undesired), is being pulled upwardly by the suction. We agree with the appellant that it is clear from the explanation of this mechanism which begins at line 59 of column 6, that pins 74 and 76 do not grip the linen pieces, but merely sense the presence of linen pieces, and therefore the Rosenfeld apparatus has only one pair of gripping jaws. Since all of the claims under this rejection require the presence of two sets of gripping jaws, the combined teachings of the four references could not, in our view, establish a prima facie case of obviousness with regard to the subject matter recited in claims 77-80, 90 and 96.

In any event, the rejection of claims 77-80, 90 and 96 is not sustained.

CONCLUSION

The rejection of claims 1-5, 22-24, 29-30, 54, 81-84, 113 and 114 as being unpatentable over Robin in view of Umeda and Heinz is not sustained.

The rejection of claims 77-80, 90 and 96 as being unpatentable over Robin in view of Umeda, Heinz and Rosenfeld is not sustained.

The rejection of claim 28 as being unpatentable over Robin in view of Umeda and Heinz is sustained. However, this is designated to be a new rejection by this panel of the Board of Patent Appeals and Interferences under 37 CFR 1.196(b).

In view of our action concerning claim 28, this decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b)(amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53,131, 53,197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. & Trademark Office 63,122 (Oct. 21, 1997)). 37 CFR § 1.196(b) provides, "A new ground of rejection shall not be considered final for purposes of judicial review."

Regarding any affirmed rejection, 37 CFR § 1.197(b) provides:

(b) Appellant may file a single request for rehearing within two months from the date of the original decision

37 CFR § 1.196(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of proceedings (37 CFR § 1.197(c)) as to the rejected claims:

(1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .

(2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. . . .

Should the appellant elect to prosecute further before the Primary Examiner pursuant to 37 CFR § 1.196(b)(1), in order to preserve the right to seek review under 35 U.S.C. §§ 141 or 145 with respect to the affirmed rejection, the effective date of the affirmance is deferred until conclusion of the prosecution before the examiner unless, as a mere incident to the limited prosecution, the affirmed rejection is overcome.

If the appellant elects prosecution before the examiner and this does not result in allowance of the application, abandonment or a second appeal, this case should be returned to the Board of Patent Appeals and Interferences for final action on the affirmed rejection, including any timely request for reconsideration thereof.

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

AFFIRMED-IN-PART, 37 CFR 1.196(b)

NEAL E. ABRAMS
Administrative Patent Judge

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) BOARD OF PATENT

CHARLES E. FRANKFORT
Administrative Patent Judge

) APPEALS
) AND
) INTERFERENCES

JOHN P. McQUADE
Administrative Patent Judge

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NEA:pgg

CRAIG A. SUMMERFIELD
BRINKS, HOFER, GILSON & LIONE
P.O. BOX 10395
CHICAGO, IL 60610