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| Pearne & Gordon LLP 1801 East 9th Street Suite 1200 Cleveland, OH 44114-3108 | | | TAWFIK, SAMEH | |
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MARINO SAIN

Appeal 2019-003053
Application 14/202,530
Technology Center 3700

Before JILL D. HILL, JEREMY M. PLENZLER, and
PAUL J. KORNICZKY, *Administrative Patent Judges*.

PLENZLER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1–4, 8, and 12. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

¹ We use the word Appellant to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as Bortolin Kemo S.P.A. Appeal Br. 1.

CLAIMED SUBJECT MATTER

The claims are directed to a machine for positioning box flaps. Claim 1, reproduced below and reformatted for clarity, is illustrative of the claimed subject matter:

1. A machine for positioning flaps of a box, comprising:
 - a conveying surface (2) advancing the box (B) along an advancement direction (X);
 - wherein the machine comprises
 - at least one orientating device (4) having one or more elements which orient at least one transverse flap (F1, F2) of the box (B) in a substantially vertical position, and
 - at least one grip device (5), which is movable along the direction of advancement (X) and which grips the transverse flap (F1, F2) in a substantially vertical position, wherein the grip device (5) is adapted and effective to grip the transverse flap (F1, F2) and move the box (B) along the advancement direction (X), the grip device (5) comprising a pair of gripping elements (51, 52) which are movable to a gripping position where they can effectively grip the transverse flap (F1, F2), in the gripping position the gripping elements (51, 52) being oriented to grip a planar transverse flap extending in a direction transverse to the advancement direction (X).

REFERENCES

The prior art relied upon by the Examiner is:

| Name | Reference | Date |
|-----------------------|--------------------|---------------|
| Norris | US 4,565,050 | Jan. 21, 1986 |
| Hartness | US 2006/0070850 A1 | Apr. 6, 2001 |
| Takamasa ² | JP 61-244719 | Oct. 31, 1986 |

REJECTIONS

Claims 1, 8, and 12 are rejected under 35 U.S.C. § 103 as being unpatentable over Takamasa and Hartness.

Claims 2–4 are rejected under 35 U.S.C. § 103 as being unpatentable over Takamasa, Hartness, and Norris.

OPINION

Claim 1, the sole independent claim, requires “at least one grip device (5), which is movable along the direction of advancement (X) and which grips the transverse flap (F1, F2)” and “is adapted and effective to grip the transverse flap (F1, F2) and move the box (B) along the advancement direction (X).” Claim 1 further requires that the “grip device” includes “a pair of gripping elements . . . oriented to grip a planar transverse [box] flap extending in a direction transverse to the advancement direction (X).” The Examiner finds that Takamasa teaches a number of features recited in claim 1, including “at least one grip device (via 20).” Final Act. 2. The Examiner finds, however, that Takamasa

does not disclose that the grip device . . . is movable along the direction of advancement, and . . . grips the transverse flap in a

² References to the description in Takamasa are to the English-language translation.

substantially vertical position, nor adapted and effective to grip the transverse flap and move the box along the advancement direction, grip device comprising a pair of gripping elements.

Id. The Examiner finds that

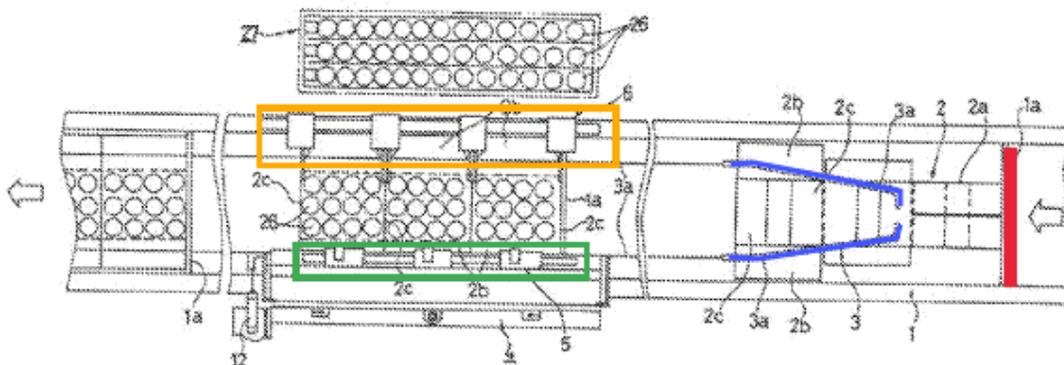
Hartness discloses similar machine with grip device to grip [the] top portion of containers and moves along direction of advancement, and adapted and effective to grip the transverse flap and move the box along the advancement direction, grip device comprising a pair of gripping elements see for example (Figs. 2 & 6; via pair of gripping elements 132).

Id. The Examiner reasons that “it would have been obvious . . . to have modified Takamasa’s grip device to be movable along the direction of advancement, while gripping the top portion of the container, and being adapted and effective to grip the transverse flap and move the box along the advancement direction” and to include “a pair of gripping elements, as suggested by Hartness, in order to assure strong grip to the container’s top portion while being conveyed along the transport direction to avoid any jamb (paragraph 0008).” *Id.*

Appellant contends that in Takamasa, “the boxes (2) are moved forward by a plurality of sending bars (1a), not by being dragged forward by any gripping devices 6 [including levers 20].” Appeal Br. 2. Appellant contends that “the Examiner . . . incorrectly refer[s] to the elements (20) of Takamasa as ‘grip devices’” because “the elements (20) are referred to [in Takamasa] as ‘levers’, not ‘grip devices’” and “are merely orienting devices to maintain the flaps in a vertical orientation so they don’t flop over.” Reply Br. 1. Appellant further contends that “[i]n Hartness, the gripping elements 192, 192 are (at best) oriented to grip a planar element extending in a direction parallel (not perpendicular) to the advancement direction (see

Hartness, elements 192, 192 in Figs. 1–6).” Appeal Br. 3–4. Appellant contends, therefore, that “even if the structure of Takamasa was somehow modified according to the structure of Hartness, the transverse limitation of claim 1 will still not be met.” *Id.* at 4. Appellant contends that there is no reason to modify Takasama’s teachings as proposed by the Examiner because “Takamasa already has the sending bars (1a) which are completely satisfactory for moving the boxes along the direction of advancement.” Reply Br. 1. Appellant further notes that “[t]he Examiner has given no technical explanation as to how the levers (20) of Takamasa would be modified in order to (1) make them so they could grip something and (2) make the lever units moveable down the conveyor line.” *Id.* at 3. Appellant has the better position.

The Examiner fails to provide sufficient reasons as to why one skilled in the art would have modified Takamasa’s box transport mechanism to include grippers as required by claim 1. Our annotated version of Takamasa’s Figure 1 is reproduced below.



Takamasa’s Figure 1 illustrates a box transport mechanism, which includes box flap spreading mechanisms, and is annotated with colored regions to facilitate discussion. Takamasa explains that “the back side surface of the

last box in the three boxes is [in] contact[] with the sending bar 1a, [and] the box transport mechanism will be moved intermittently to the direction of the arrow and then the three boxes 2 can be transported intermittently.”

Takamasa 3. That is, the boxes in Takamasa are advanced in the directions of the arrows via sending bar 1a (colored red). Side-flap spreading mechanism 3 (colored blue) opens the side flaps 2b (the flaps oriented parallel to the direction of travel indicated by the arrows). *Id.* First spreading mechanism 5 (colored green) then initially spreads sagittal flaps 2c (the flaps oriented perpendicular to the direction of travel indicated by the arrows), which facilitates second spreading mechanism 6 (colored orange), which includes levers 20, holding sagittal flaps 2c in an open position. *Id.* at 4. First spreading mechanism 5 can then be removed and vessels 26 can be placed in or removed from the box. *Id.* at 5.

As explained above, and noted by Appellant, Takamasa already has a mechanism for advancing the boxes (sending bar 1a), as required by the “gripping device” of claim 1. The Examiner reasons that it would have been obvious to have modified Takamasa’s levers 20 to include the features of the “grip device” recited in claim 1 in view of Hartness “in order to assure strong grip to the container’s top portion while being conveyed along the transport direction to avoid any jamb.” Final Act. 3 (citing Hartness ¶ 8). The Examiner offers no explanation, however, as to why one skilled in the art would have wanted “to assure a strong grip” with levers 20 in Takamasa’s device, particularly when those levers are in a fixed position along the path of the boxes and only act to spread the sagittal flaps. As explained above, sending bar 1a already advances the boxes in Takamasa, so we see no reason why one skilled in the art would make levers 20 movable

along with the boxes as the Examiner proposes. Indeed, the Examiner offers no explanation as to why one skilled in the art would expect Takamasa's system to jamb, which is the purported reason for making levers 20 grip and be moveable with the boxes. The cited portion of Hartness does not support the Examiner's reasoning. *See* Hartness ¶ 8 (including no reference to "avoid[ing] any jamb").

For at least the reasons set forth above, we do not sustain the Examiner's decision to reject claims 1–4, 8, and 12.

CONCLUSION

The Examiner's rejections are reversed.

DECISION SUMMARY

In summary:

| Claims Rejected | 35 U.S.C. § | Reference(s)/Basis | Affirmed | Reversed |
|------------------------|--------------------|-------------------------------|-----------------|-----------------|
| 1, 8, 12 | 103 | Takamasa, Hartness | | 1, 8, 12 |
| 2–4 | 103 | Takamasa, Hartness, Norris | | 2–4 |
| Overall Outcome | | | | 1–4, 8, 12 |

REVERSED