

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* DIXIE CONSUMER PRODUCTS LLC<sup>1</sup>

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Appeal 2008-0584  
Reexamination Control 90/007,335  
Patent 6,328,557<sup>2</sup>  
Technology Center 3900

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Decided: 29 April 2008

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Before JOHN C. MARTIN, ADRIENE LEPIANE HANLON, and  
CAROL A. SPIEGEL, *Administrative Patent Judges*.

HANLON, *Administrative Patent Judge*.

DECISION ON APPEAL

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<sup>1</sup> The Patent Owner and Reexamination Requester.

<sup>2</sup> Patent 6,328,557 issued to Grishchenko et al. (“Grishchenko”) on  
December 11, 2001.

A. STATEMENT OF THE CASE

The Appellant appeals from the final rejection of claims 1-3 subject to reexamination.<sup>3</sup> 35 U.S.C. §§ 134(b) and 306. We have jurisdiction under 35 U.S.C. §§ 6(b) and 306. We AFFIRM.

Claim 1 is the only independent claim on appeal (Br. 13<sup>4</sup>):

1. An apparatus for producing heat-insulating composite paper containers comprising:

an oven producing currents of heated air;

a conveyor for conveying a plurality of fabricated containers through the oven to cause a foamable material to foam on a surface of each fabricated container, the conveyor including a plurality of spaced apart holders for supporting respective fabricated containers, each holder configured for supporting its respective fabricated container in a loose manner, enabling the fabricated container to freely wobble relative to its holder under the influence of conveyor vibration and air currents within the oven, while preventing the fabricated container from making contact with any other fabricated container within the oven;

wherein each holder supports its respective container in a substantially vertical orientation;

wherein each of the holders includes an upstanding portion extending through a mouth of a respective fabricated container;

wherein each holder supports its respective fabricated container in an inverted state, with the upstanding portion extending upwardly through the mouth of the fabricated container;

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<sup>3</sup> Claims 4 and 5 are also subject to reexamination. The Examiner has indicated that “Claims 4 and 5 are patentable and/or confirmed.” Final Office Action mailed January 17, 2006, at 1.

<sup>4</sup> Substitute Appeal Brief filed March 9, 2007.

wherein each holder further includes a generally horizontal shoulder portion located below an upper end of each upstanding portion for directly supporting a rim of the mouth of a respective fabricated container; and

wherein each holder is configured such that a respective container is free to move in any direction relative to the holder except vertically downwardly.

The Examiner finally rejected claims 1-3 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Iioka,<sup>5</sup> the admitted prior art in columns 1-2 of Grishchenko, Gilbert,<sup>6</sup> and Johnson.<sup>7</sup>

#### B. ISSUES

The Appellant presents two issues on appeal, i.e., whether Gilbert is analogous art and whether a container is able to “freely wobble” relative to the holder disclosed in Johnson.

As discussed hereinafter, the teachings in Gilbert are, in relevant part, cumulative of the teachings in Johnson. Therefore, it is not necessary to decide whether the teachings of Gilbert, in combination with Iioka, the admitted prior art, and Johnson, would have rendered the claimed invention obvious.

The sole issue on appeal is:

Has the Appellant shown that the Examiner erred in finding that the holder disclosed in Johnson enables a container to “freely wobble” relative to the holder?

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<sup>5</sup> Patent 4,435,344 issued to Iioka on March 6, 1984.

<sup>6</sup> Patent 3,715,109 issued to Gilbert on February 6, 1973.

<sup>7</sup> Patent 4,274,532 issued to Johnson on June 23, 1981.

C. FINDINGS OF FACT

The following findings of fact are believed to be supported by a preponderance of the evidence. Additional findings of fact as necessary appear in the Analysis portion of the opinion.

1. Appellant's invention

The Appellant's invention is directed to a method and apparatus for producing heat-insulating composite paper containers. Grishchenko 2:20-21.

At least a portion of each container is formed of paper and is provided on at least one surface with a foamable material. The containers are conveyed through an oven while being supported on a conveyor for a sufficient period of time to cause the foamable material to foam under the action of moisture released from the paper. Grishchenko 2:24-31.

During conveyance through the oven, each container is supported on the conveyor in a manner that prevents the containers from making contact with each other. Grishchenko 2:31-36.

The conveyor includes a plurality of spaced apart holders for supporting respective containers. Each holder is configured to support its respective container in a loose manner, enabling the container to freely wobble relative to its holder under the influence of conveyor vibration and/or air currents within the oven, while preventing the container from contacting any other container within the oven. Grishchenko 2:53-61.

A container is free to move in any direction relative to the holder except vertically downward. Grishchenko 4:32-34.

One configuration of a holder is illustrated in Grischchenko Figure 7 reproduced below:

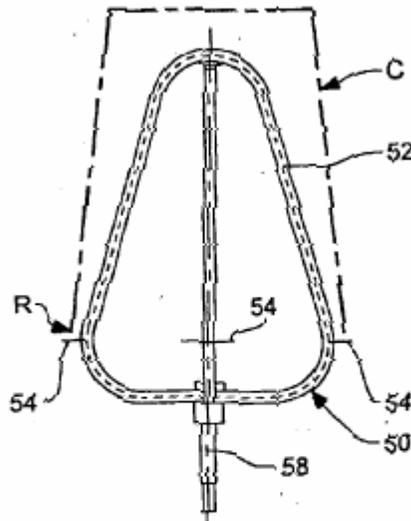


FIG. 7

Grischchenko Figure 7 depicts a container holder.

Holder **50** includes a series of rods **52** that converge upwardly. At their lower ends, the rods **52** carry horizontal shoulders **54** upon which a rim **R** of a container can rest, such that the bottom panel of the container is spaced above an upper end of the holder, and the side body of the container is spaced from the rods **52**. Grishchenko 5:5-10.

2. Admitted prior art

The Appellant's Specification discloses a prior art heat-insulating paper container. Grishchenko 1:22-23 and Figure 5.

The heat-insulating container is fabricated as follows. Two paper sheets are laminated with a thermoplastic synthetic resin film such as polyethylene. A blank is cut from each of the paper sheets. Using a

Appeal 2008-0584  
Reexamination Control 90/007,335  
Patent 6,328,557

conventional cup-forming machine, the two blanks are fabricated into a container. The fabricated untreated container is then subjected to a heat treatment that causes moisture in the paper to vaporize. Grishchenko 1:35-50.

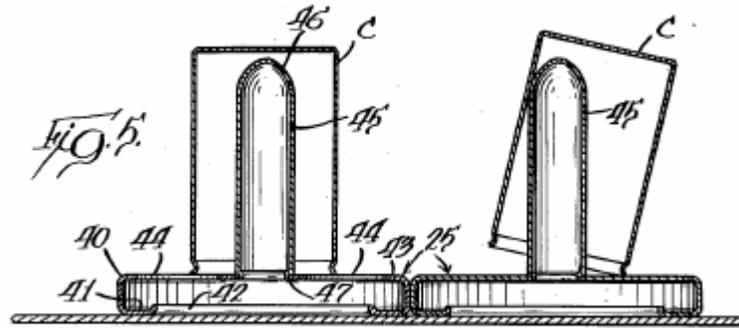
According to the Appellant's Specification, Patent 4,435,344 (Iioka) discloses that the untreated containers may be heat-treated in an oven. The containers, disposed right side up, pass through the oven on a conveyor belt. In order to achieve maximum cup stability, the cups are preferably in an inverted state, i.e., supported on their larger diameter rims, on the conveyer belt. Nevertheless, as the containers pass through the oven, they are subjected to air currents and conveyer vibrations that cause the very lightweight containers to be displaced against one another. Accordingly, the containers can become stuck together. Some containers may be displaced to such an extent that they fall over and create a jam during conveyance. Grishchenko 1:51-64.

### 3. Johnson

The invention disclosed in Johnson relates to a can handling system for moving cans through an oven without contact between the cans. Johnson 1:5-10.

In one embodiment of the invention, the can handling system comprises a plurality of free-standing can carriers each having (1) means loosely engageable with a can to hold a can in an inverted position and (2) a base of a size to prevent contact between two cans when a pair of can carrier bases are in contact. Johnson 2:6-11.

One configuration of a can carrier is illustrated in Johnson Figure 5 reproduced below:



Johnson Figure 5 depicts a can carrier.

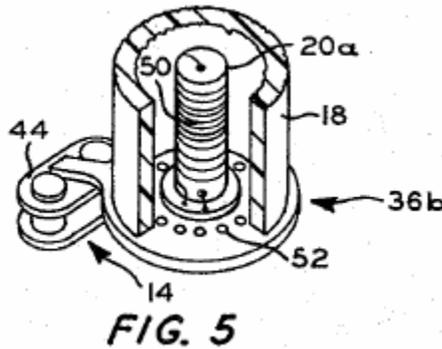
Can carrier **25** has a base **40**. A rod **45** extends upwardly central of the base and has its lower end affixed thereto, as by welding at **47**. The rod **45** has a height less than the height of a can whereby the lower open end of the can may rest on upper panel **43** of the base **40**. Johnson 3:60-4:13.

#### 4. Gilbert

Gilbert discloses an apparatus for heating thermoplastic parison preforms. Gilbert 2:7-8.

The parisons are conveyed through a heating chamber and are supported on a holding device. Gilbert 2:45-52.

One configuration of a parison holding device is illustrated in Gilbert Figure 5 reproduced below:



Gilbert Figure 5 depicts a parison holding device.

The parison holding device includes apertures **52** and resistance wires **50** to provide a combination of circulating hot air and a heated mandrel for heating the interior of the parison.<sup>8</sup> Gilbert 3:74-4:13.

#### D. PRINCIPLES OF LAW

A claimed invention is not patentable if the subject matter of the invention would have been obvious to a person having ordinary skill in the art at the time the invention was made. 35 U.S.C. § 103(a); *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (2007); *Graham v. John Deere Co.*, 383 U.S. 1 (1966).

Facts relevant to a determination of obviousness include (1) the scope and content of the prior art, (2) any differences between the claimed invention and the prior art, (3) the level of skill in the art, and (4) any relevant objective evidence of obviousness or non-obviousness. *KSR*, 127 S. Ct. at 1734; *Graham*, 383 U.S. at 17-18.

One of ordinary skill in the art is presumed to have skills apart from what the prior art references expressly disclose. *See In re Sovish*, 769 F.2d

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<sup>8</sup> Except for apertures **52** and resistance wires **50**, the parison holding device illustrated in Figure 5 of Gilbert is substantially the same as the can carrier **25** disclosed in Johnson.

738, 743 (Fed. Cir. 1985). A person of ordinary skill is also a person of ordinary creativity, not an automaton. *KSR*, 127 S. Ct. at 1742.

E. ANALYSIS

The Examiner found that Johnson discloses container holders **25** for supporting containers on a conveyor. The Examiner found that the holder **25** includes a post **45** spaced from an interior surface of an associated container such that the container is held in a loose manner and is free to move in any direction except vertically downward. Referring to the right half of Figure 5, the Examiner found that the container can “freely wobble” relative to the holder **25**. Ans. 4.<sup>9</sup>

The Appellant argues that the holder in Johnson is not configured to allow a container to freely wobble relative to the *holder*. Rather, the Appellant argues that any wobbling of the can would be relative to the *base*. Br. 10.

In response, the Examiner explains that the base **40** is part of the holder **25** which comprises the base **40** and the rod **45**. Ans. 6; *see also* Final 4.<sup>10</sup> The Examiner also points out that Figure 5 shows a container C that has wobbled relative to the holder **25**. Ans. 6.

The Appellant does not demonstrate any error in these findings. Rather, the Appellant attempts to establish error by pointing to the following statement made by the Examiner in the Final Office Action:

Patent owner argues that the holder taught by Johnson would not allow the container to freely wobble. This argument is contradicted by Fig. 5 of Johnson which clearly illustrates a container that has *wobbled*. [Italics added.]

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<sup>9</sup> Examiner’s Answer mailed July 27, 2007.

<sup>10</sup> Final Office Action mailed January 17, 2006.

Final 4.

The Appellant argues that the absence of the word “freely” in this passage establishes that the containers in Johnson may wobble, but they do not “*freely wobble*.” Br. 10.

Although the Examiner omitted the word “freely” in the passage reproduced above, the Examiner did use the phrase “freely wobble” elsewhere in the Final Office Action to describe how the holder **25** in Johnson supports a container. *See, e.g.*, Final 3 (“As shown in the right half of Fig. 5, the container C can ‘freely wobble’ relative to the holder **25**.”); Final 4 (air currents and conveyor vibrations will inherently cause/enable the containers to “freely wobble” on the holder **25** of Johnson).

The Appellant also points out that claim 1 recites that “each holder is configured such that a respective container is free to move in any direction relative to the holder except vertically downwardly.” The Appellant argues that this language was added to more clearly highlight the recitation in claim 1 that the holder enables a container to “freely wobble” relative to the holder. Br. 10.

As shown in Figure 5 of Johnson, the holder **25** does not include any structure that prevents the container C from freely wobbling relative to the holder **25**. *See* Ans. 7. The holder **25** includes a rod **45** spaced from an interior surface of the associated container C such that the container is held in a loose manner and is free to move in any direction relative to the holder except vertically downward. Ans. 4. To the extent that the rod **45** and the base **40** restrict some movement of the container C, the Appellant’s holder

Appeal 2008-0584  
Reexamination Control 90/007,335  
Patent 6,328,557

similarly restricts movement via rods **52** and shoulders **54**. *See* Appellant's Figure 7.

In sum, the Appellant has failed to demonstrate that the phrase "freely wobble" means something other than the movement illustrated in the right half of Johnson Figure 5.

For the reasons set forth above, the Appellant has not shown that the Examiner erred in finding that the holder disclosed in Johnson enables a container to "freely wobble" relative to the holder.

F. DECISION

The rejection of claims 1-3 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Iioka, the admitted prior art in columns 1-2 of Grishchenko, Gilbert, and Johnson 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) (2006).

AFFIRMED

cc (via U.S. Mail):

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