

The opinion in support of the decision being entered today
is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte LIE-ZHONG GONG, PETER D. PIERCE and
JUSTIN A. MEHAFFY

Appeal 2006-3391
Application 10/371,485
Technology Center 3700

Decided: September 20, 2007

Before TERRY J. OWENS, JENNIFER D. BAHR, and
ANTON W. FETTING, *Administrative Patent Judges*.

BAHR, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Lie-Zhong Gong et al. (Appellants) appeal under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 7, 11-17, 27 and 28, the only

Appeal 2006-3391
Application 10/371,485

pending claims. We have jurisdiction over this appeal under 35 U.S.C. § 6 (2002).

THE INVENTION

Appellants' claimed invention is directed to a process of packaging an article using a packaging machine adapted to reactivate an adhesive or sealant composition that has been previously applied to a case or carton (Specification 1 and 2). Claim 7, the only independent claim, reads as follows:

7. A process of packaging an article by forming, filling and sealing a packaging container comprising a packaging material that has had applied to at least a portion thereof a reactivatable adhesive, said process comprising folding a packaging material along predetermined fold lines, said packaging material having applied to at least a first portion thereof a reactivatable adhesive, contacting the adhesive present on said first portion of said packaging material with a second portion of said packaging material, and exposing the applied reactivatable adhesive to ultrasonic waves by contacting the first or the second portion of said packaging material with an ultrasonic horn for a time sufficient to reactivate the adhesive, and allowing the reactivated adhesive to solidify, thereby bonding the first portion to said second portion to form or seal the packaging container.

THE REJECTIONS

The Examiner relies upon the following as evidence of unpatentability:

Moore US 2,603,925 Jul. 22, 1952

Appeal 2006-3391
Application 10/371,485

Adams	US 5,425,218	Jun. 20, 1995
Samida	US 6,123,792	Sep. 26, 2000

Appellants seek review of the Examiner's rejections under 35 U.S.C. § 103(a) of claims 7, 13-17 and 28 as unpatentable over Adams, claims 11 and 12 as unpatentable over Adams in view of Samida and claim 27 as unpatentable over Adams in view of Moore.

The Examiner provides reasoning in support of the rejection in the Answer (mailed December 8, 2005). Appellants present opposing arguments in the Appeal Brief (filed November 17, 2005).

ISSUES

Appellants contend claims 7, 13-17 and 28 are not unpatentable over Adams because, in the process of Adams, side flaps are folded over opposite sides of packaging stock that has a heat reactivated adhesive, not a reactivatable adhesive, present thereon (Br. 3) and because the carton of Adams is not formed before it is filled (Br. 3-4). Appellants do not argue any of the dependent claims separately from independent claim 7 and do not argue the rejections of claims 11 and 12 as unpatentable over Adams in view of Samida and claim 27 as unpatentable over Adams in view of Moore separately from the rejection of claim 7 as unpatentable over Adams. We therefore focus our attention on claim 7, with the remainder of the claims standing or falling with claim 7.

In light of Appellants' contentions, this appeal presents two issues for our consideration. The first issue is whether Adams meets the limitation of claim 7 of "said packaging material having applied to at least a first portion thereof a reactivatable adhesive, contacting the adhesive present on said first

portion of said packaging material with a second portion of said packaging material " and the second issue is whether Adams meets the limitation of claim 7 of "forming, filling and sealing a packaging container."

FINDINGS OF FACT

FF1 An advantage of Adams' method is that adhesive that is substantially non-tacky after it has been applied and until it is activated, rather than wet glue, is pre-applied to the carton blank (Adams 3:5-11). "[T]he adhesive is pre-applied (and dried) on the carton blanks before the blanks are delivered to the carton packer" (Adams 4:15-18). Adhesive 6 is placed on portions of the blanks 5 that will form side flaps 7, 8 and bottom tabs 9, 10 (Adams 4:56-60, Fig. 2).

FF2 The carton blanks 5 of Adams are folded around pre-arranged bundles of cigarette packs overwrapped in cellophane (Adams 5:1-4). The blanks are then folded at two score lines 13, 14 that become the bottom edges of the carton, thus forming the bottom, front and back walls of the carton (Adams 5:6-9).

FF3 The blank-enclosed bundle is then pushed onto an exit ramp 19, where a flap folding apparatus 20 folds and holds the bottom tabs 9, 10 and side flaps 7, 8 of Adams' carton blank 5 over the sides of the enclosed bundle and a flap folding apparatus 21 folds and holds the side walls 11, 12 of carton blank 5 over the bottom tabs 9, 10 and over side flaps 7, 8, thereby forming a carton (Adams 5:10-18).

FF4 In the Adams process, the carton is not formed prior to being filled (FF2 and FF3).

FF5 After the carton is formed (FF3), it is moved along the exit ramp 19. At least one heating element 25, 26 is positioned on each side of exit ramp

19 to activate the pre-applied dry adhesive. At least one cooling element 27, 28 is positioned just downstream of the heating elements on each side of the exit ramp 19 to set the activated adhesive. (Adams 5:19-20 and 33-39.) Adams' disclosure of activating the pre-applied dry adhesive after folding side flaps 7, 8, bottom tabs 9, 10 and side walls 11, 12 belies any notion that the pre-applied adhesive used by Adams is not reactivatable when the adhesive 6 on the side flaps 7, 8 and bottom tabs 9, 10 contacts side walls 11, 12.

FF6 In accordance with Appellants' Specification, "[t]he article to be packaged may be inserted into the package either during the formation of the package, such as in conventional wrap-around packaging, or after, such as in conventional Bliss box packaging, tray formation, in the manufacture of boxes and bags" (Specification 3-4).

FF7 Appellants do not dispute the Examiner's determination (Answer 3-4) that it would have been obvious to provide the method of Adams with an ultrasonic device in the form of a horn for generating the ultrasonic waves to activate the adhesive. Appellants also do not dispute the Examiner's determinations (Answer 5) that it would have been obvious to produce such ultrasonic waves at from about 20 kHz to about 40 kHz, in view of the teachings of Samida, in order to activate the pre-applied adhesive and to provide a paper bag having a pre-applied adhesive, as taught by Moore, as an alternative for packaging the cigarette packs of Adams.

DISCUSSION

The pre-applied adhesive used by Adams is reactivatable (FF5). Moreover, it is not reactivated until after the side flaps 7, 8, bottom tabs 9,

10 and side walls 11, 12 are folded (FF5). Appellants' first argument, that Adams' side flaps are folded over opposite sides of packaging stock that has a heat reactivated adhesive, not a reactivatable adhesive, present thereon, is therefore without merit.

The other issue before us focuses on the limitation "forming, filling and sealing" and is particularly concerned with the order in which these steps are performed. Specifically, Appellants' argument seems to presume claim 7 requires that the forming step be performed before the filling step, a sequence which is not met by Adams (FF4). A two-part test has been established for determining if the steps of a method claim that do not otherwise recite an order must nonetheless be performed in the order in which they are written. First, we look to the claim language to determine if, as a matter of logic or grammar, the recited steps must be performed in the order written. "If not, we next look to the rest of the specification to determine whether it 'directly or implicitly requires such a narrow construction.'" *Altiris Inc. v. Symantec Corp.*, 318 F.3d 1363, 1371, 65 USPQ2d 1865, 1869-70 (Fed. Cir. 2003) (quoting *Interactive Gift Express, Inc. v. CompuServe Inc.*, 256 F.3d 1323, 1343, 59 USPQ2d 1401, 1416 (Fed. Cir. 2000)) (emphasis in original). If not, the sequence in which such steps are written is not a requirement of the claim. *Id.*

Following the first part of the test, we look to the claim language itself and find no indication, as a matter of logic or grammar, that the steps of forming and filling the container must be performed in any particular order. As evidenced by Adams, the container could be formed around the item(s) that will form the contents thereof and thus could be formed while the contents are being inserted. Moreover, looking to the Specification in

Appeal 2006-3391
Application 10/371,485

accordance with the second step of the test, we find that Appellants' Specification makes clear that the article to be packaged may be inserted into the package either during the formation of the package, as in a conventional wrap-around packaging as in Adams' method, or after (FF6). We thus conclude that claim 7 does not require that the step of forming the container be performed before the step of filling the container. Rather, a method such as that taught by Adams, in which the article is inserted during formation of the package, satisfies the claim language at issue.

For the reasons discussed above, Appellants' arguments do not demonstrate error in the Examiner's rejections of claims 7, 11-17, 27 and 28. The rejections are sustained.

SUMMARY

The decision of the Examiner to reject claims 7, 11-17, 27 and 28 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) (2006).

AFFIRMED

vsh

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