The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TIMOTHY J. BLENKE
and
DENNIS E. HARRIS

Appeal 2006-1042
Application 10/208,131
Technology Center 3700

DECIDED: AUGUST 24, 2006

Before GARRIS, KRATZ, and FRANKLIN, Administrative Patent Judges.

GARRIS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the Examiner's final rejection of claims 1 and 3 through 34. We AFFIRM.

Independent claims 1, 9, 14, 18 and 34 are representative of the subject matter on appeal and are set forth below:

1. Apparatus for forming folds in a foldable material in a continuous operation, the apparatus comprising a frame adapted for receiving a moving web of the foldable material through the apparatus along a path defining a longitudinal direction of movement of the web through the apparatus, and a plurality of skis mounted on the frame for pivoting adjustment about an axis extending laterally of the longitudinal direction of movement of the web, said skis being adapted to engage the web of foldable material for use in forming folds in the engaged web as the web of foldable material moves through the apparatus along the path.

9. Apparatus as set forth in claim 1 further comprising a material guide for engaging the web of foldable material to form the material in cooperation with one of the skis to produce one of the folds.

14. Apparatus as set forth in claim 1 further comprising a web straightener located along the path of the web of foldable material upstream from the skis for automatically centering the web of foldable material along a centerline of the path.

18. Apparatus for forming folds in a foldable material in a continuous operation, the apparatus comprising a frame adapted for receiving a moving web of the foldable material through the apparatus along a path, and a plurality of skis mounted on the frame and adapted to engage the web of foldable material for use in forming folds in the engaged web as the web of foldable material moves through the apparatus along the path, and a material guide for engaging the web of foldable material to form the material in cooperation with at least one of the skis to produce at least one of the folds.

34. Apparatus for forming folds in a foldable material in a continuous operation, the apparatus comprising a frame adapted for receiving a moving web of the foldable material through the apparatus along a path, and a plurality of skis mounted on the frame and adapted to engage the web of foldable material for use in forming folds in the engaged web as the web of foldable material moves through the apparatus along the path, and a web straightener mounted on the frame upstream along the path of the web from

the skis for automatically correcting the position of the web laterally of its path.

The Examiner relies upon the following reference as evidence of anticipation:

Barut[1] FR 1.198.140
June 8, 1959

Claims 1 and 3 through 34 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Barut.

We refer to the Brief, the Answer and the Reply Brief for a complete exposition of the opposing viewpoints expressed by Appellants and the Examiner concerning the issues before us on this appeal.

OPINION

For the reasons set forth in the Answer and below, we sustain this rejection.

Barut discloses a device for continuously pleating a sheet-like material (Trans. 1). As shown in Figures 1, 2 and 3, Barut's apparatus

> comprises, on a fixed frame 1, an output reel 2 receiving a roller 3 for material to be pleated in the form of a sheet 4, two guide rollers 5 between which the sheet 4 passes, and a track 6 of profiled pleating sections.
>
> These profiled sections are in this case T-shaped profiled sections and are distributed in two

[1] Our understanding of this reference is based on the English translation of record.

> imbricated layers, the profiled sections 7 of the first layer, called the lower layer, having their web directed downward, alternating with the profiled sections 8 of the second layer, called the upper layer, which have their web directed upward (see more particularly Figure 8).
>
> Brackets 10 fixed on a trestle 11 receive, in vertical control slots, threaded rods 12 which pass through bores formed opposite each other in the webs of the profiled sections 7 and 8. By virtue of these brackets and these rods, it is possible to adjust the position of the profiled sections 7 and 8, by means of nuts screwed onto said rods on each side of the webs of these profiled sections, both in the vertical direction and in the horizontal direction [Trans. pp. 2-3].

Barut's machine also includes "[a]n L-shaped corner piece 30 [which] is fixed on the rods 12 on each side of the track of T-shaped profiled sections for guiding the sheet 4" (Fig. 4; p. 4).

Appellants and the Examiner have identified three key issues in this appeal:

(1) pertaining to claim 1, whether Barut discloses a fold forming apparatus comprising "a plurality of skis mounted on the frame for pivoting adjustment about an axis extending laterally of the longitudinal direction of movement of the web" (Br. 5; Answer 7);

(2) pertaining to claim 9 (and claim 18), whether Barut discloses "a material guide for engaging the web of foldable material to form the material in cooperation with one of the skis to produce one of the folds" (Br. 9; Answer 8); and

(3) pertaining to claim 14 (and claim 34), whether Barut discloses "a web straightener located along the path of the web of foldable material upstream from the skis for automatically centering the web of foldable material along a centerline of the path" (Br. 9-10; Answer 8). We address each issue below.

Issue 1: Plurality of skis mounted on the frame for pivoting adjustment about an axis (Claim 1)

We first address Appellants' embodiment in independent claim 1. As noted above, the key issue with respect to independent claim 1 centers on the claim limitation "a plurality of skis mounted on the frame for pivoting adjustment about an axis extending laterally of the longitudinal direction of movement of the web" (Br. 5; Answer 7).

According to the Examiner, Barut anticipates independent claim 1 by disclosing

> an apparatus for forming folds in a foldable material in a continuous operation that comprises a frame (11) for receiving a moving web (4) along a path defining a longitudinal direction of movement of the web through the apparatus, and a plurality of skis (7,8) mounted on the frame (11) via a plurality of mounting rods (12) for engaging the web (4) as the web moves through the apparatus; wherein the skis (7, 8) are adjustable for different thickness of material and pivotable about one of the mounting rods (12) during adjustment [Answer 3].

The Examiner explains that, in Barut's apparatus, "each end of the mounting rod (12) is mounted to one side of the frame (11) through vertical slots on

bracket (10) and held in a desired positioned by a pair of nuts (Fig. 4), and each mounting rod (12) has an axis extending laterally of the longitudinal direction of movement of the web" (id.). The Examiner contends that "[i]n [Barut's] arrangement, the skis can be adjusted for different thickness of the web material by adjusting an end mounting rod, at the entrance section for example, along the vertical slots on the brackets (10) while the other end mounting rod, at the exit section for example, is held in place such that the skis (7 or 8) are pivoting about the axis of the held mounting rod during adjustment" (id.).

Appellants argue that "[n]owhere does Barut disclose or otherwise even suggest that the pleating sections (7, 8) are pivotable about an axis as recited in claim 1, let alone an axis that extends laterally of the longitudinal direction of movement of the web through the device" (Brief, page 6). Appellants further argue that "[t]he only movement of the pleating sections (7, 8) permitted by Barut's device (and indeed the only movement disclosed by Barut) is horizontal movement and vertical movement both of which are translational and not pivoting movement about an axis" (id.). Appellants also contend that "[t]here is no conceivable manner, let alone any manner disclosed by Barut, to pivot the pleating sections about an axis that extends normal to and out of the plane of the web as asserted by the Examiner" (Br. 8).

In response, the Examiner contends that Appellants' argument

> is not found persuasive because in order to adjust the skis (7 or 8) in the apparatus of BARUT for accepting [a] web of different thickness, the mounting rods (12) must be adjusted along the vertical slots on brackets (10) and the skis (7 or 8) can be adjusted for different thickness of the web material by adjusting an end mounting rod, at the entrance section for example, along the vertical slots on the brackets (10) while the other end mounting rod, at the exit section for example, is held in place such that the skis (7 or 8) are pivoting about the axis of the held mounting rod during adjustment. Therefore, the skis (7,8) of BARUT are fully capable of pivoting adjustment about an axis extending laterally of the longitudinal direction of movement of the web through the apparatus [Answer 7].

In reply, Appellants maintain:

> Nowhere does Barut expressly disclose that the pleating sections (7, 8) are pivotable about a rotation axis of one of the rods. The Examiner's position is therefore one of inherency, i.e., that the pleating sections (7,8) of Barut are inherently capable of being pivoted about a rotation axis of one of the rods (12). However, there is no basis in fact and/or technical reasoning to reasonably support the determination that the pivotable skis recited in claim 1 <u>necessarily</u> flows from the teachings of Barut [Reply Br. 3].

In further support of their position, Appellants argue that

> [a] position more consistent with the express teaching of Barut would be that the upper and lower pleating sections (7, 8) are moved vertically relative to each other in accordance with the vertical movement disclosed by Barut to increase or decrease the vertical spacing therebetween to thereby accommodate webs of different thicknesses. For a thicker web, for example, the nuts that hold each of the four rods supporting either one of the upper and lower pleating sections (7, 8) on the brackets (12) must all be loosened and the vertical position of all four rods (and hence the pleating section) can be changed simultaneously. Thus, all of the upper pleating sections (8) can be moved vertically with respect to the lower pleating sections (7) (or visa versa) to accommodate various web thicknesses [Reply Br. 4-5].

We have carefully reviewed the record on this appeal and based thereon find ourselves in agreement with the Examiner that the apparatus of appealed claim 1 for forming folds is anticipated by the reference to Barut.

It is well settled that, if a prior art device inherently possesses the capability of functioning in the manner claimed, anticipation exists regardless of whether there was recognition that it could be used to perform the claimed function. *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). While Appellants argue that there is no express disclosure of the pleating sections of Barut's apparatus being pivotable about a rotation axis of one of the rods, an inference of inherency is supported by the Examiner's reasoned analysis of how the

pleating sections of Barut are capable of pivoting adjustment about an axis extending laterally of the longitudinal direction of movement of the web.

Claims 3 through 8, 15 through 17, and 31 through 33, ultimately dependent from claim 1, were not separately argued and, therefore, stand or fall with claim 1.

Accordingly, we sustain the rejection of claims 1, 3 through 8, 15 through 17, and 31 through 33 as being anticipated by Barut.

Issue 2: Material guide for engaging the web of foldable material to form a fold in cooperation with a ski (Claims 9 and 18)

We now turn to the rejection of dependent claim 9 on the same grounds. Claim 9 requires that the apparatus of claim 1 "further comprises a material guide for engaging the web of foldable material to form the material in cooperation with one of the skis to produce one of the folds." The key issue in this claim involves the interpretation of the above noted claim limitation (Br. 9; Answer 8).

Appellants' arguments appear to interpret this limitation as restricted to their embodiment illustrated in Figure 4 and described on page 15, lines 12-16 of the specification ("The material guides 95 engage the web W just to the inside and just to the outside of the inner and outer skis 45 of the set 43 to fold the web around those skis making certain a fold F is formed by the outer longitudinal edges 101 of the runner 49"). The Examiner, on the other hand, interprets this claim limitation more broadly as "not [requiring] that

the at least one fold must be formed directly by the material guide, [but] rather [by] the cooperation of the material guide with at least one ski to produce the fold" (Answer 8). That is, the claim limitation does not require that the material guide "engage the web (W) just to the inside and just to the outside of the inner and outer skis . . . to fold the web around those skis making certain a fold (F) is formed by the outer longitudinal edges (101) of the runners" (Br. 9).

During examination, claims are interpreted as broadly as is reasonable and consistent with the specification. *See In re Morris*, 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997).

Appellants' arguments in the Brief and Reply Brief appear to restrict the claim limitation at issue to the embodiment described on page 15, lines 12-16 of the Specification (Br. 9). On the other hand, the specification unambiguously states, "that details of the foregoing embodiment, given for purposes of illustration, are not to be construed as limiting the scope of this invention" (Spec. 16). We also note that claim 9 does not recite any structure regarding the material guide. One with ordinary skill in the art, given Appellants' disclosure above, would not have read the limitation of claim 9 as narrowly as Appellants argue in the Brief. Thus, we agree with the Examiner's forenoted broad interpretation as reasonable and consistent with the specification (i.e., wherein the claim is interpreted to not require that the at least one fold be formed <u>directly</u> by the material guide).

The Examiner contends that "the apparatus of BARUT further comprises two material guides (30) for engaging the web (4) and each guide cooperates with one of the skis (8) to form a fold in the web" (Answer 4).

Appellants argue:

> There is no disclosure found anywhere in Barut, nor is it shown in the figures thereof, that the L-shaped corner pieces (30) act in cooperation with one of the pleating sections to produce one of the folds (e.g., between the corner piece and a pleating section). In fact, Barut states that "each intermediate band has simply slid along the corner-piece flange which was supporting it." See page 5, lines 2-4 of the translation. Thus, Barut fails to show or otherwise even suggest a material guide for engaging the web of foldable material to form the material in cooperation with one of the skis to produce one of the folds [Br. 9].

We note that Figure 4 of Barut shows the L-shaped corner piece 30 interacting with the outermost profiled section 8. We also note that L-shaped corner piece 30 extends the length of the apparatus in the same manner as profiled sections 7, 8 (Figures 1 and 2). Thus, as the web progresses through Barut's apparatus, a fold will be formed by the cooperation of the L-shaped corner piece 30, the associated outermost profiled section 8, and the profiled section 7 which is adjacent to the outermost profiled section 8. This fold will be formed between the outermost profiled section 8 and adjacent profiled section 7 in a manner similar to the fold shown in Barut's Figures 4 through 6. We understand that

this fold is not formed directly by L-shaped corner piece 30 at a point between piece 30 and outermost profiled section 8. However, this is not required by claim 9 as previously explained.

Claims 10 through 13, ultimately dependent from claim 9, were not separately argued and, therefore, stand or fall with claim 9.

Accordingly, we sustain the Examiner's anticipatory rejection of claims 9 through 13 over Barut.

Independent claim 18 differs from independent claim 1 in that it does not require the pivoting function of the skis. However, like claim 9, it requires a material guide.

Appellants' arguments regarding claim 18 mirror their arguments regarding claim 9. We have already found these arguments unpersuasive and refer to our discussion above in response.

Claims 19 through 30, which ultimately depend from claim 18, were not separately argued and, therefore, stand or fall with claim 18.

Accordingly, we also sustain the Examiner's rejection of claims 18 through 30 under 35 U.S.C. § 102(b) as being anticipated by Barut for the reasons given above.

Issue 3: Web straightener for automatically centering the web of foldable material along a centerline of the path (Claims 14 and 34)

Next, we review the rejection of claim 14 over Barut. Claim 14 further limits claim 1 by requiring that the apparatus for forming folds further comprises "a web straightener located along the path of the web of foldable material upstream from the skis for automatically centering the web of foldable material along a centerline of the path."

According to the Examiner, "[w]ith respect to claim 14, the apparatus of BARUT further comprises a web straightener comprising guide rollers (5) mounted upstream of the ski (7,8), wherein the straightener (5) is designed to function such that it automatically and correctly centers the web (4) along a centerline of the path of the web" (Answer 4).

Appellants argue that "Barut discloses two guide rollers (5) between which the sheet (4) passes before the sheet moves through the pleating track (6). As explained below with respect to claim 34, Barut fails to disclose that the guide rollers can straighten (i.e., laterally shift) the sheet as it passes through the rollers" (Br. 10). The Examiner maintains that the rollers 5 of Barut "structurally and functionally satisfy the claimed straightener" (Answer, para. bridging cols. 8-9).

We note that Barut's Figure 3 shows sheet 4 following a horizontal path through the apparatus from the point where it leaves guide rollers 5 to the point where the final product is received. Sheet 4 is drawn from a supply roller 3 and is centered along that horizontal path. As the material from roller 3 is depleted, it is apparent that the portion of the sheet 4 that extends between the supply roller 3 and the guide rollers 5 will deviate from the "centerline" of this horizontal path. That is, the portion of sheet 4 will become angularly inclined, rather than horizontal, as the roller 3 becomes depleted of material. Guide rollers 5 serve to maintain sheet 4 horizontally centered along the path through Barut's apparatus even when the position of sheet 4 between supply roller 3 and guide rollers 5 becomes angularly inclined. Thus, Barut's guide rollers 5 perform the function of "automatically centering the web of foldable material along a centerline of the path [i.e., from a vertical perspective]."

Accordingly, we sustain the rejection of claim 14 under 35 U.S.C. § 102(b) as being anticipated by Barut.

Independent claim 34 differs from independent claims 1 and 18 in that it does not require the pivoting function of the skis or the material guide. Like claim 14, claim 34 requires a web straightener.

Appellants argue "Barut discloses a pair of rollers (5) through which the sheet (4) passes upstream of the pleating track (6). There is no disclosure anywhere in Barut, however, that the rollers are capable of automatically correcting the position of the sheet (4) laterally (e.g., widthwise) of the sheet in the manner of the web straightener recited in

claim 34. Nor is there any indication from the drawings of Barut that the rollers adjust the lateral position of the sheet (4) as the web passes through the rollers" (Br. 13).

We note that Appellants' argument gives a "widthwise" correction as an example of what is meant by the claim term "laterally." Therefore, Appellants implicitly concede that "laterally" is not limited to a widthwise correction. Particularly in light of this concession, we interpret the above argued limitation to include the type of previously discussed correction which occurs in Barut. It follows the Appellants' claim 34 argument is unpersuasive for reasons explained above with respect to claim 14.

Accordingly, we sustain the anticipatory rejection of claim 34 over Barut.

CONCLUSION

The decision of the Examiner rejecting all appealed claims is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv) (effective Sep. 13, 2004; 69 Fed. Reg. 49960 (Aug. 12, 2004); 1286 Off. Gaz. Pat. Office 21 (Sep. 7, 2004)).

AFFIRMED

Bradley R. Garris Administrative Patent Judge	))))	
Peter F. Kratz Administrative Patent Judge	))))	BOARD OF PATENT APPEALS AND INTERFERENCES
Beverly A. Franklin Administrative Patent Judge	))))	

BRG/MC/cam

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