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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SAMANEH SHAHIDEHPOUR and
ATSUSHI KOBAYASHI

Appeal 2011-002362
Application 11/349,515
Technology Center 3600

Before PHILLIP J. KAUFFMAN, BRETT C. MARTIN, and
HYUN J. JUNG, *Administrative Patent Judges*.

JUNG, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Samaneh Shahidehpour and Atsushi Kobayashi (Appellants) appeal under 35 U.S.C. § 134 from a rejection of claims 1-6 and 8-10. Appellants' representative presented oral argument on January 24, 2013. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM-IN-PART.

THE CLAIMED SUBJECT MATTER

Sole independent claim 1 is reproduced below.

1. A duct mating assembly comprising:

a first duct having side members connected along edges of the side members defining an interior air space, the first duct extending from a first end to a second end, and

a coupling portion formed on one of the first or second ends, the coupling portion including first and second sections spaced from each other and joined by side sections;

a second duct having side members connected along edges of the side members defining an interior air space, the second duct extending from a first end to a second end, and a coupling portion formed on one of the first or second ends, the coupling portion including third and fourth sections spaced from each other and joined by side sections;

the first and second ducts operative to couple with each other, wherein the first section of the first duct includes a fifth portion extending to a sixth portion, and a transition portion positioned between the fifth and sixth portions, the transition portion stepping downward and extending forward and then stepping back up relative to the sixth portion for preventing air leakage between the first and second ducts and;

wherein the second section of the first duct includes a first snap feature formed thereon, and the fourth section of the second duct including a second snap feature formed thereon, the first and second snap features operative to connect the second and fourth sections of the first and second ducts.

THE REJECTIONS

Appellants seek our review of the following rejections[1]:

Claims 1-6 and 8-10 stand rejected under 35 U.S.C. § 112, second paragraph, as indefinite.

Claims 1 and 8-10 stand rejected under 35 U.S.C. § 102(b) as anticipated by Johnson (US 1,179,322; iss. Apr. 11, 1916).

ANALYSIS

Indefiniteness

The Examiner finds that the terms "downward" and "forward" in claim 1 are relative terms which render claims 1-6 and 8-10 indefinite.

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[1] The Examiner previously rejected claims 1-6 and 8-10 under 35 U.S.C. § 112, second paragraph, as indefinite; claims 1-6 and 8-10 under 35 U.S.C. § 102(b) as anticipated by Johnson; and claims 1-6 and 8-10 under 35 U.S.C. § 102(b) as anticipated by Virgin (US 4,046,409; iss. Sept. 6, 1977). Final Office Action 3, 5 (Aug. 20, 2009). Appellants seek review of the aforementioned rejections. App. Br. 5-6. However, under "(3) Status of Claims," the Answer indicates that claims 1 and 8-10 are rejected and that claims 2-6 are objected to. Ans. 3; *see also* Reply Br. 1. The Answer also only lists Johnson under "(8) Evidence Relied Upon" and states that the ground of rejection applicable to the appealed claims is only a rejection of claims 1 and 8-10 under 35 U.S.C. § 102(b) as anticipated by Johnson. Ans. 4; *see also* Reply Br. 1. We cannot state with certainty whether the indefiniteness rejection has been withdrawn or is maintained based on our review of the Answer and prosecution history. Thus, we address the indefiniteness rejection. Also, although the Answer does not expressly indicate that the rejection of claims 2-6 as anticipated by Johnson and the rejection of claims 1-6 and 8-10 as anticipated by Virgin are withdrawn, we presume the Examiner has withdrawn these rejections because the Answer no longer relies on Virgin as evidence and claims 2-6 are not discussed under the "(9) Grounds of Rejection" or "(10) Response to Argument" in the Answer. *See* Ans. 4-7. Therefore, we address the rejection of claims 1 and 8-10 as anticipated by Johnson.

Office Action 3 (Aug. 20, 2009). Appellants argue that the terms are not indefinite as the terms refer to relative positions of defined components. App. Br. 6.

Section 112, second paragraph, "is satisfied if a person skilled in the field of the invention would reasonably understand the claim when read in the context of the specification." *Marley Mouldings Ltd. v. Mikron Indus., Inc.*, 417 F.3d 1356, 1359 (Fed. Cir. 2005). Claim 1 recites that

> the first section of the first duct includes a fifth portion extending to a sixth portion, and a transition portion positioned between the fifth and sixth portions, the transition portion stepping downward and extending forward and then stepping back up relative to the sixth portion for preventing air leakage between the first and second ducts.

App. Br., Claims App'x.

The Specification states that the transition portion 115 "is positioned between the [fifth] and [sixth] portions 105, 110" and "steps downward and extends forward before stepping back up to the [sixth] portion 110, as best shown in Figure 4." Spec. ¶ [0011]. Figure 4 shows a transition portion 115 between a fifth portion 105 and a sixth portion 110. The depicted transition portion 115 extends downwardly away from the fifth portion 105 and extends upwardly towards the sixth portion 110.

Thus, in view of the Specification's description of the transition portion and the transition portion as shown in Figure 4, a person skilled in the art would reasonably understand "downward" and forward" as recited by claim 1. Accordingly, we cannot sustain the rejection of claims 1-6 and 8-10 under 35 U.S.C. § 112, second paragraph, as indefinite.

Anticipation based on Johnson

The Examiner finds that Johnson discloses the subject matter of claim 1. Ans. 4-6.

Appellants state that the rejection does not specify structure using reference numbers that correspond to the claimed structure and that the Examiner has simply copied the claims and asserted that it is disclosed in the prior art. App. Br. 8. However, the Examiner provides reference numbers 1 and 2 of Johnson for the first and second ducts of claim 1. Office Action 3 (Aug. 20, 2009); Ans. 4-5. Moreover, all that is required is the statutory basis of the rejection and the reference or references relied upon in a sufficiently articulate and informative manner as to meet the notice requirement of 35 U.S.C. § 132. *In re Jung*, 637 F.3d 1356, 1363 (Fed. Cir. 2011). Thus, the mere paucity of reference numbers to correlate structure in Johnson to structure recited by claim 1 in the final rejection does not amount to reversible Examiner error.

Appellants argue that Johnson does not disclose the formation of snap features on the second and fourth sections of the first and second ducts, as required by claim 1. App. Br. 9; Reply Br. 5. Appellants argue that members of Johnson are connected by the interface of the grooves 11, 12 and flanges 6, 10 of the first and second members 1, 2. App. Br. 9. The Examiner responds that Figure 3 of Johnson illustrates the first snap feature (flange or seam 10) and the second snap feature (groove 11). Ans. 6 (referring to an annotated Figure 3 at Ans. 5).

We agree with Appellants that Johnson discloses various sections of a wall pipe being securely held by groove 11 receiving flange or seam 10. *See* Johnson, p. 1, ll. 20-26 (disclosing that an object of Johnson is "to provide

each of the sections of the wall pipe with annular grooves formed therein . . . for receiving the seams formed at the connection of the inner and outer walls of the sections"), ll. 71-83 (disclosing that the outer member 2 is provided with an annular groove 11 which is provided for receiving the flange or seam 10 when the two sections are connected as shown in Figure 3 and that the inner member 1 is provided with an annular groove 12 for receiving the flange or seam 6). Johnson discloses that groove 11 receives flange or seam 10 to lock the sections when securely connected and that another groove 12 receives another flange or seam 6 to facilitate groove 11 locking the connected sections. *Id*. at ll. 71-83. Although not described as a "snap feature," the arrangement of the groove 11 and flange or seam 10 as shown in Figures 2 and 3 of Johnson indicates that the flange or seam 10 must deflect away from the groove 11 when first mating the upper and lower sections, and then the flange or seam 10 must deflect back into the groove 11 to connect the two mated sections. Thus, the groove 11 and flange or seam 10 are operative to connect the sections and are allowed to flex to engage each other, similar to the description of the snap features in the Specification. *See* Spec. ¶¶ [0013], [0016]. Thus, Johnson more likely than not supports the Examiner's finding regarding the snap features of claim 1.

Appellants also argue that Johnson does not disclose the transition portion positioned between the fifth and sixth portions, as required by claim 1. App. Br. 9; Reply Br. 3, 5. The Examiner responds that Figure 3 of Johnson illustrates the transition portion between fifth and sixth portions. Ans. 7 (referring to an annotated Figure 3 at Ans. 5). Appellants argue that the Examiner is referring to two separate ducts for disclosing the fifth and sixth portions whereas claim 1 requires that the fifth and sixth portions be

included on the first duct. Reply Br. 2-3. Appellants assert that the Examiner has not pointed to a sixth portion that is part of the first duct. *Id.* Appellants also argue that claim 1 requires the transition portion to be positioned between fifth and sixth portions and step downward, extend forward, and then step back up to the sixth portion. Reply Br. 3.

Appellants' arguments are unpersuasive. The Examiner's annotated Figure 3 indicates that an upper portion of the inner member 1 discloses the fifth portion, a middle portion of the outer member 2 discloses the sixth portion, and portions of the inner member 1 that step down and step up. Johnson discloses that the inner member 1 at its upper end is bent over the outer member 2 to form the flange or seam 6 to hold the two members together and that the outer member 2 is seamed or flanged over the lower edges of the inner member 1 at reference numeral 10. Johnson, p. 1, ll. 59-61, 69-71. Thus, Johnson discloses that the inner and outer members 1, 2 form one section of the wall pipe that can be connected to another section. *See* Johnson, p. 1, ll. 40-42, 49-51; Figs. 2, 3; *see also* Fig. 4 (showing modified form that includes inner and outer members 1^a and 2^a). The Examiner's fifth and sixth portions are part of the upper section formed by the upper inner member 1 and upper outer member 2. *See* Johnson, Fig. 3; *see also* Johnson, Fig. 4. Thus, the Examiner's fifth and sixth member are on the same duct and not separate ducts as asserted by Appellants.

Appellants state that the Examiner points to the vicinity of reference numerals 10 and 11 for disclosing the snap features and points to reference numeral 12 as a transition portion. Reply Br. 3. Appellants argue that Johnson teaches that the grooves 11, 12 are annular grooves and yet the Examiner cites the grooves for different structures. *Id.* Appellants'

argument is not persuasive as the Examiner finds that groove 11 discloses the second snap feature and a portion near groove 12 discloses the transition portion. *See* Ans. 5. Claim 1 recites that the transition portion steps downward, extends forward and then extends back up relative to a sixth portion. The Examiner indicates a lowermost portion of the groove 12 as a "step down" and a portion beyond the groove as a "step up." Ans. 5 (annotated Fig. 3). Thus, the Examiner is not relying only on groove 12 as disclosing the transition portion. Appellants have not shown that it is reversible error to rely on one groove 11 and portions around another groove 12 for two elements of claim 1.

Appellants argue that Johnson does not disclose that the first and second ducts are sealed relative to each other by a transition portion, as required by claim 1. Reply Br. 4. Appellants point to Johnson's claim 2 as disclosing that air circulation is allowed between multiple sections with tongues 5, 9 serving to spread the air. *Id.* at 3-4. However, Johnson discloses connecting inner and outer walls of sections of a wall pipe for furnaces. Johnson, p. 1, ll. 12-14, 20-26. The interlocking of grooves 11 and 12 (which includes the Examiner's transition portion) with their respective flanges or seams 6, 10 presents two barriers for air leaking from inside of a section of the wall pipe to the outside. *See* Johnson, Figs. 2, 3. The fact that air is allowed to travel from one section to an adjacent section of the wall pipe between its inner and outer members 1 and 2 does not persuade us that Johnson fails to support the Examiner's finding of a transition portion that seals air within the sections of the wall pipe relative to each other.

Appellants argue that Johnson does not disclose a first section including a transition portion and a second section including the snap feature. Reply Br. 4. Appellants also argue that Johnson does not disclose a snap feature formed on a fourth section of a second duct. *Id.* at 5. Appellants assert that Johnson discloses joining first and second members in a spaced relationship with seams formed at opposing ends of the first and second members. *Id.* Appellants also assert that the seam is formed all about the periphery and that there are no opposing sections that have different structural features. *Id.*

The Examiner's annotated Figure 3 shows a first snap feature on a portion of the upper section of the wall pipe and a second snap feature on a portion of the lower section of the wall pipe. Ans. 5. The Examiner's transition portion is on another portion of the upper section. *Id*. Thus, the Examiner's first snap feature and transition portion are on different sections of one of the ducts, while the second snap feature is on another section of the second duct. Appellants' argument indicates that the inner and outer members 1 and 2 must disclose the first and second ducts, respectively, of claim 1. However, the Examiner indicates that inner and outer members 1 and 2 disclose a first duct or a second duct. Ans. 4-5; Office Action 3 (Aug. 20, 2009). Also, Johnson discloses that the inner and outer members 1, 2 form one section of a wall pipe. *See* Johnson, p. 1, ll. 40-42, 49-51; Figs. 2, 3; *see also* Fig. 4 (showing modified form that includes inner and outer members 1^a and 2^a). Thus, Appellants' arguments are not persuasive.

For the reasons *supra*, we sustain the Examiner's rejection of claim 1 under 35 U.S.C. § 102(b) as anticipated by Johnson.

As for dependent claim 8, Appellants assert that Johnson does not disclose a first snap feature including an angled section extending upward to a contact section and then transitioning downward. App. Br. 11. The Examiner responds that Figure 3 of Johnson discloses the first snap feature including an angled section 7 extending upward to a contact section and then transitioning downward. Ans. 7. Appellants further argue that the flange or seam 10 is simply an overlap of the inner and outer members as shown in Figure 2 of Johnson. Reply Br. 3. Appellants thus contend that there is no description of the angled section and contact surface in Johnson and the Examiner does not point to any structure in the Answer that discloses the first angled section. *Id.*

We agree with Appellants that the Examiner has not pointed to a structure that extends upward to a contact section and then transitions downward. The Examiner finds that the inclined portion 7 of Johnson discloses the angled section of claim 8. Ans. 6. However, the inclined portion 7 does not extend upward to the Examiner's first contact section. *See* Ans. 5. Instead, the inclined portion 7 extends into a portion that is seamed or flanged. Johnson, p. 1, ll. 69-71; Fig. 3. Claim 9 depends from claim 8, and claim 10 depends from claim 9. Therefore, on the record before us, we cannot sustain the rejection of claims 8-10 under 35 U.S.C. § 102(b) as anticipated by Johnson.

DECISION

The rejection of claims 1-6 and 8-10 under 35 U.S.C. § 112, second paragraph, is reversed.

The rejection of claim 1 under 35 U.S.C. § 102(b) as anticipated by Johnson is affirmed.

The rejection of claims 8-10 under 35 U.S.C. § 102(b) as anticipated by Johnson is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv) (2011).

AFFIRMED-IN-PART

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