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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte STEPHEN M. SEIBEL, MICHAEL M. PEREVOZCHIKOV,
and NORMAN BECK

Appeal 2011-001578
Application 11/435,386
Technology Center 3700

Before: CHARLES N. GREENHUT, MICHAEL L. HOELTER, and
BARRY L. GROSSMAN, *Administrative Patent Judges*.

GROSSMAN, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF CASE

Appellants appeal under 35 U.S.C. § 134 from the Final Rejection mailed March 2, 2010 rejecting claims 1, 3, 5-13 and 16-19. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

The Claimed Subject Matter

The claimed subject matter relates to a scroll machine using fluid under pressure to bias and seal one of the scroll members against the other scroll member. Spec. [0002], [0008]. Claim 1 is the only independent claim. Claim 1, reproduced below, is representative of the claimed subject matter:

1. A scroll machine comprising:
 - first scroll member having a first spiral wrap projecting outwardly from a first end plate;
 - a second scroll member having a second spiral wrap projecting outwardly from a second end plate, said second spiral wrap being interleaved with said first spiral wrap;
 - a drive member for causing said spiral wraps to orbit with respect to one another whereby said spiral wraps form pockets of progressively changing volume between a suction zone of said scroll machine and a discharge zone of said scroll machine;
 - a first biasing chamber defined by said first scroll member, said first biasing chamber being in communication with a first intermediate pocket formed by said scroll members between said suction zone and said discharge zone, gas pressure within said first biasing chamber biasing said first scroll member towards said second scroll member;

a fluid passage extending between said first intermediate pocket and said discharge zone of said scroll machine; and

a second biasing chamber in communication with a second intermediate pocket formed by said scroll members between said suction zone and said discharge zone, gas pressure within said second biasing chamber biasing said first scroll member towards said second scroll member.

References

The Examiner relied upon the following prior art references:

Wallis	US 5,607,288	Mar. 4, 1997
Sano	US 5,846,065	Dec. 8, 1998
Yuichi	JP 06093981	May 4, 1994

Rejection

Claims 1 and 3-19 are pending in the application. App. Br. 5. Claims 14 and 15 are withdrawn from consideration. *Id.* Claims 1, 3-13 and 16-19 stand finally rejected. *Id.* However, Appellants seek our review only of the following rejections:

1. claims 1, 3, 7-13 and 16-19 rejected under 35 U.S.C. § 103(a) over Sano and Yuichi; and

2. claims 5 and 6 rejected under 35 U.S.C. § 103(a) over Sano, Yuichi, and Wallis. App. Br. 9.¹

Claim 4 is addressed below with respect to the Examiner's double patenting rejection.

¹ Citations to "App. Br. ____" are to the indicated page in the Appeal Brief filed July 14, 2010.

ANALYSIS

Claims 1, 3, and 7-13

Appellants argue claims 1, 3, and 7-13 as a group. App. Br. 10. Appellants only present arguments directed to independent claim 1. Appellants do not present separate arguments for dependent claims 3 and 7-13 (App. Br. 14), so these claims stand or fall with claim 1. *See* 37 C.F.R. § 41.37(c)(1)(vii) (2011).

The Examiner found that Sano discloses the basic structure of the claimed scroll machine, but does not disclose a second biasing chamber in communication with a second intermediate pocket as called for in the claims. Ans. 5-6.² The Examiner also found that Yuichi discloses a pressure biased scroll machine including a second biasing chamber in communication with a second intermediate pocket. *Id.* at 6. The Examiner concluded that at the time of the invention it would have been obvious to one of ordinary skill in the art to add a second biasing chamber to the scroll machine of Sano as taught by Yuichi. *Id.* The rationale provided by the Examiner for the proposed modification was that the modified structure would stably press together the fixed scroll member and the orbiting scroll member to provide enhanced sealing and durability. *Id.*; Ans. 14-17.

We conclude that the Examiner has established a *prima facie* case of the reasons why Appellants are not entitled to a patent based on the claims pending in this case. Thus, this shifts the burden of going forward to the Appellants who must produce evidence and/or argument rebutting the case of unpatentability. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

² Citations to “Ans. ____” are to the indicated page in the Examiner’s Answer mailed August 18, 2010.

Appellants admit that Sano discloses a scroll machine with a single chamber in communication with a relief port to limit backpressure in the chamber to reduce wear on the scrolls, but argue that “there is no reason to include a second biasing chamber in Sano.” Reply Br. 4.³

Appellants also admit that Yuichi discloses a series of chambers operating at different pressures to gradually increase the biasing force along a fixed scroll end plate (Reply Br. 4), but argue that there are no passages between the various chambers and the discharge region in Yuichi and thus assert that it would not be obvious to include the fluid passage extending between the first intermediate pocket and the discharge zone called for in the claims based on the Yuichi disclosure. *Id.* at 4-5; App. Br. 12. Appellants also argue that modification of Yuichi by including the claimed passage would disrupt the pressure difference among the chambers taught by Yuichi. *Id.*

Appellants’ argument that there are no passages between the various chambers and the discharge region in Yuichi (Reply Br. 4; App. Br. 12) is misplaced. Contrary to Appellants’ argument, the Examiner did not rely on Yuichi for the disclosure of a fluid passage between the first intermediate pocket and the discharge zone of the scroll machine. The Examiner cited Sano for this structure. Ans. 6. The Examiner found that Sano discloses a first biasing chamber 4a defined by the first scroll member 1 which is in communication with a first intermediate pocket through a passage 1d. Ans. 6. The Examiner also found that the passage 1d, the chamber 4a, and the passage 29 form a fluid passage extending between the first intermediate

³ Citations to “Reply Br. ____” are to the indicated page in the Reply Brief filed October 18, 2010.

pocket and the discharge zone of the scroll machine, as called for in claim 1. *Id.* Appellants have not pointed to any evidence or provided any persuasive reasoning tending to establish that the Examiner erred in these findings. Also, the claims do not call for passages between each of the various chambers and the discharge region. The claims require only a single fluid passage extending between the first intermediate pocket and the discharge zone, which the Examiner found was present in Sano. Ans. 6.

Contrary to Appellants' argument, the Examiner has provided an extensive, well-reasoned rationale and explanation as to why there is good reason a person of ordinary skill in the art would include a second biasing chamber in Sano based on the disclosure of Yuichi. Ans. 14-17. Appellants have not pointed to any evidence or provided any persuasive reasoning tending to establish that the Examiner erred in his findings of what the applied references disclose or in his conclusion that the claims would have been obvious based on the applied references.

Appellants conclude, without citation of evidence or persuasive reasoning, that modification of Yuichi by including the claimed passage would disrupt the pressure difference among the chambers taught by Yuichi. App. Br. 12; Reply Br. 5. However, as stated by the Examiner, the rejection is based on modifying the basic structure of Sano as suggested by Yuichi by adding an additional chamber, not by modifying Yuichi.

Accordingly, we affirm the rejection of claims 1, 3, and 7-13.

Claims 16-19

Regarding claims 16-19, Appellants repeat their position made with respect to claim 1 and further argue that it would not have been obvious to place the second chamber outside of the first chamber. App. Br. 14. The

Examiner found that it would have been obvious to place the second chamber outside of the first chamber (such as chamber 4a in Sano) since the chamber having the relief passage is for relieving over pressure, and the radially innermost annular chamber would be the highest pressure chamber. Ans. 7. Appellants have not pointed to any evidence or provided any persuasive reasoning tending to establish that the Examiner erred in this finding. Accordingly, we affirm the rejection of claims 16-19.

Claims 5 and 6

The Examiner found that Sano combined with Yuichi discloses the invention substantially as claimed but did not disclose either a temperature responsive valve (as called for in claim 5) or a pressure responsive valve (as called for in claim 6) located between the first biasing chamber and the suction zone. Ans. 7. The Examiner found that Wallis discloses both a temperature and a pressure responsive valve located between the first biasing chamber and the suction zone. *Id.* The Examiner concluded that at the time of the invention it would have been obvious to one of ordinary skill in the art to utilize a pressure or a temperature responsive valving system as taught by Wallis in order to create a leakage path between the discharge zone and the suction zone for protection purposes. *Id.* The Examiner further explained that the valve in Sano and the valves in Wallis are safety valves which under certain conditions provide an added benefit to a scroll machine. Ans. 19.

Appellants again state that Sano and Wallis each have a single biasing chamber and that Yuichi fails to disclose the claimed fluid passage as reasons why they think the Examiner's rejection is in error. We dealt with Appellants' positions on Sano and Yuichi in our analysis of claim 1. With

respect to Wallis, Appellants have not pointed to any evidence or expressed any persuasive reasoning tending to establish that the Examiner erred in his findings or conclusions regarding the application of Sano, Yuichi, and Wallis to claims 5 and 6. Accordingly, we affirm the rejections of claims 5 and 6.

Double Patenting Rejections

Appellants do not seek review of the obvious-type double patenting rejections applied against claims 1, 3-13 and 16-19.⁴ An appellant's brief must be responsive to every ground of rejection stated by the examiner that the appellant is presenting for review in the appeal. If a ground of rejection stated by the examiner is not addressed in the appellant's brief, that ground of rejection will be summarily sustained by the Board. MPEP 1205.02. *See, e.g., Hyatt v. Dudas*, 551 F.3d 1307, 1313-14 (Fed. Cir. 2008) (the Board may treat arguments Appellant failed to make for a given ground of rejection as waived).

Accordingly, we sustain each of the multiple obviousness-type double patenting rejections in the Final Rejection against claims 1, 3-13 and 16-19.

DECISION

We AFFIRM the decision of the Examiner to reject claims 1, 3-13 and 16-19.

⁴ *See* Final Rej. mailed March 2, 2010, pages 5-7; Ans. 7-12. In Appellants' "Response After Final", filed April 16, 2010, Appellants stated that they "elect to defer responding to the double patenting rejections until the claims of the subject patent application are found otherwise allowable." Response After Final at 3. Appellants' election does not change how we deal with arguments not made or rejections not addressed.

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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).

AFFIRMED

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