

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte FRANK WEGEHAUPT

Appeal 2007-4232
Application 10/261,493
Technology Center 1700

Decided: February 21, 2008

Before EDWARD C. KIMLIN, THOMAS A. WALTZ, and LINDA M. GAUDETTE, *Administrative Patent Judges*.

KIMLIN, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1-22, 49, 51 and 52.

Claims 1 and 49 are illustrative:

1. A process for spraying a moving fibrous material web with at least one nozzle, comprising:

feeding a spray medium volume flow of the at least one nozzle via at least one valve; and

damping or weakening pulsations occurring in the volume flow of the spray medium with a membrane accumulator having two areas separated by a flexible membrane, in which one area is filled with gas and the other area is filled the spray medium.

49. A process for spraying a moving fibrous material web with a device that includes at least one nozzle, at least one valve arranged to feed a spray medium volume flow to said at least one nozzle, and a damping element arranged to damp or weaken pulsations occurring in the volume flow of the spray medium, said process comprising:

feeding an adjustable spray medium volume flow of the at least one nozzle via the at least one valve activated at a clock frequency of less than about 30Hz, the at least one valve comprising one of a pulsation valve or a discontinuously activated proportional valve; and

damping or weakening pulsations occurring in the volume flow of the spray medium.

The Examiner relies upon the following references in the rejection of the appealed claims:

Morgart	5,171,134	Dec. 15, 1992
Wolf, as translated (DE '479)	DE 199 46 479 A1	Mar. 29, 2001
Wolf	6,444,090 B1	Sep. 3, 2002

Appellant's claimed invention is directed to a process for spraying a moving fibrous material web with at least one nozzle. The process entails feeding a spray medium volume flow through a valve, such as a pulsation valve, and then passing the spray medium through a damping element, such as a membrane accumulator, in order to dampen or weaken the pulsations in the flow of spray medium.

Appealed claims 1-18, 22, and 52 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 and 40 of the patent to Wolf in view of Morgart. Claims 1-22, 49, 51, and 52 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over DE '479 in view of Morgart.

Appellant does not set forth separate, substantive arguments for dependent claims 2-22. Appellant's repetitive statements that the applied references do not "positively disclose" the features of the claims do not satisfy the requirement for a separate, substantive argument explaining why the claimed feature would have been nonobvious to one of ordinary skill in the art. Accordingly, claims 2-22 stand or fall together with claim 1.

We have thoroughly reviewed each of Appellant's arguments for patentability. However, we are in complete agreement with the Examiner's reasoned analysis and application of the cited references as well as his cogent disposition of the arguments raised by Appellant. Accordingly, we will sustain the Examiner's rejections for the reasons set forth in the Answer and we add the following primarily for emphasis.

We consider first the Examiner's obviousness-type double patenting rejection of claims 1-18, 22, and 52. The patented claims define a process, like Appellants, for spraying a moving fibrous web with at least one nozzle comprising feeding a controlled volume flow of sprayed medium through a pulsing valve and a dampener. As recognized by the Examiner, the patented claims do not recite that the dampener is a membrane accumulator having two areas separated by a flexible membrane in which one area is filled with

gas and the other area is filled with the spray medium.¹ However, there is no dispute that Morgart evidences that a membrane accumulator was known in the art for dampening pulsations in fluid flow. Accordingly, we are in full agreement with the Examiner that it would have been obvious for one of ordinary skill in the art to select a membrane accumulator of the type disclosed by Morgart as the dampener in the patented process for spraying a moving fibrous web with a pulsated liquid medium. In our view, the combination of Morgart's membrane accumulator in the patented process which requires a dampener is nothing more than the combination of familiar elements in a known method that yields no more than predictable results. *KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1739 (2007). We note that Appellant has proffered no objective evidence which establishes that the use of a membrane accumulator as a dampener in the claimed process for spraying a moving fibrous material web produces unexpected results.

Appellant points out that the patented claims recite a pulsing valve whereas Morgart discloses a reciprocating pump, and that a careful review of Morgart provides no teaching or suggestion for replacing the reciprocating pump with a pulsing valve. However, the Examiner's conclusion of obviousness does not require any such replacement of a reciprocating pump with a pulsing valve. Rather, the Examiner's rejection is based on the rationale that it would have been obvious for one of ordinary skill in the art to select a known dampener, such as Morgart's membrane accumulator, for the dampener used in the patented process which is disclosed in only general terms. Appellants have presented no reason why

¹ Independent claims 49 and 51 broadly recite damping the pulsations without specifying a membrane accumulator.

one of ordinary skill in the art would have been dissuaded from using the known membrane accumulator for the dampener in the patented process. While Appellant contends that "it would not have been obvious to utilize damping devices especially designed for a reciprocating pump in conjunction with a pulsing valve" (Principal Br. 12, third para.), Appellant has presented no evidence that one of ordinary skill in the art would have used a membrane accumulator only with a reciprocating pump.

Accordingly, Appellant's argument lacks the requisite factual support.

We also note that Appellant's Specification attaches no particular criticality to the use of a membrane accumulator as the damping device. After teaching the use of pulsation dampers or pulse dampers at page 3 of the Specification, we are simply told that "the damping can also be carried out by a membrane accumulator" (Spec. 4, para. 0016).

Concerning the § 103 rejection of claims 1-22, 49, 51, and 52 over DE '479 in view of Morgart, the Examiner's underlying rationale is essentially the same as that set forth with respect to the double patenting rejection. Likewise, Appellant's arguments are essentially the same as those directed against the double patenting rejection. Consequently, it logically follows that we agree with the Examiner that it would have been obvious for one of ordinary skill in the art to employ the membrane accumulator of Morgart as the damping element in the process of DE '479 for spraying a moving fibrous web with fluid through a nozzle.

As a final point, we note that Appellant bases no argument upon objective evidence of nonobviousness, such as unexpected results, which would serve to rebut the *prima facie* case of obviousness established by the Examiner.

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In conclusion, based on the foregoing and the reasons well stated by the Examiner, the Examiner's rejection of the appealed claims 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)(1)(iv)(effective Sept. 13, 2004).

AFFIRMED

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