UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte THOMAS P. ORSINI
and RUSSELL T. CHRISTMAN

Appeal 2006-3022
Application 10/286,434
Technology Center 1700

Decided: March 30, 2007

Before EDWARD C. KIMLIN, THOMAS A. WALTZ, and
JEFFREY T. SMITH, *Administrative Patent Judges*.

SMITH, *Administrative Patent Judge*.

DECISION ON APPEAL

Statement of the Case

This is an appeal under 35 U.S.C. § 134 from a final rejection of claims 1-11 and 16. We have jurisdiction under 35 U.S.C. § 6.

Appellants invented an apparatus for controlling the temperature of a sealing element in a film sealing machine. The invention involves the

integration of a heat sensing device into a component of the sealing jaw that absorbs residual heat from the seal element. (Specification 3). Claims 1 and 16 are reproduced below:

1. Apparatus for sealing a plastic film, comprising:

at least one jaw housing a sealing element;

a source of impulse power to heat said sealing element over a predetermined amount of time to a temperature range effective for sealing said plastic film;

a temperature sensor for sensing the temperature related to the temperature of said sealing element;

a controller responsive to said sensed temperature adapted to modify the duration of said impulse power applied to said sealing element when said sensed temperature falls outside said temperature range and to continuously maintain said temperature range within said range over a plurality of sealing cycles.

16. Apparatus for sealing a plastic film, comprising:

at least one sealing jaw;

a sealing element mounted in said jaw with a thermally conductive mounting member;

a source of impulse power to heat said sealing element over a predetermined amount of time to a temperature range effective for sealing said plastic film;

a temperature sensor for sensing the temperature of said mounting member;

a controller responsive to said sensed temperature and adapted to modify the duration of said impulse power applied to said sealing element when said sensed temperature falls outside said temperature range and to continuously maintain said temperature within said range over a plurality of sealing cycles.

The prior art set forth below is relied upon by the Examiner as evidence of obviousness:

Perrett	5,326,416	Jul. 5, 1994
Linden	5,573,613	Nov. 12, 1996
Jurrius	5,616,199	Apr. 1, 1997

Admitted Prior Art, see Background of Invention section, pages 1-3 of the Specification.

The Examiner entered the following rejections.

I. Claims 1, 2, 5, 6, 10, 11, and 16 are unpatentable under 35 U.S.C. §102(b) as anticipated by Jurrius.

II. Claims 1, 2, 5, 6, 10, 11, and 16 are unpatentable under 35 U.S.C. §103(a) over Jurrius in view of Lunden.

III. Claims 3 and 4 are unpatentable under 35 U.S.C. § 103 (a) over either Jurrius or Jurrius in view of Lunden, and further in view of the admitted prior art at pages 1-3 of the Specification.

IV. Claim 7 is unpatentable under 35 U.S.C. § 103(a) over either Jurrius or Jurrius and Lunden.

V. Claims 1-8, 10, 11, and 16 are unpatentable under 35 U.S.C. §103(a) over the admitted prior art and Jurrius and optionally Lunden.

VI. Claim 9 is unpatentable under 35 U.S.C. §103(a) over either Jurrius or the admitted prior art, and further in view of Perret.

ISSUE

The Examiner contends Jurrius describes an apparatus for sealing a plastic film that anticipates the claimed invention. The Examiner contends that the controller (48) is capable of continuously maintaining the temperature of the sealing element within a specified range for a plurality of cycles (Answer 3).

Appellants contend that Jurrius does not anticipate or render obvious the claimed invention. Appellants contend that Jurrius discloses the temperature is monitored and controlled only during the heating portion of each cycle (Br. 7, 10).

The issue before us is whether Appellants have shown that the Examiner erred in rejecting claims 1, 2, 5, 6, 10, 11, and 16 under 35 U.S.C. §102 (b). The issue turns on whether the Examiner has established a reasonable belief that the controller unit recited in the Jurrius reference would have been capable of performing the function of the controller recited in the appealed claims, and if the Examiner met his initial burden, whether the Appellants have adequately rebutted the Examiner's position by showing that the controller element is not capable of performing the function of the controller of the presently claimed invention. Specifically, the issue is: Is

the controller element described in Jurrius capable of sensing the temperature of a sealing element and is it able to maintain the temperature within a range over a plurality of sealing cycles? We answer this question in the affirmative.

Findings of Fact

Appellants invented a sealing apparatus that detects when one or more adjacent components to the sealing element are too hot or are becoming too hot, and responds by reducing or terminating the heating of the sealing element (Specification 3: 3-7).

The control board of the apparatus functions to monitor the temperature of the sealing element during the sealing process, to determine if the temperature of the sealing element is above or below the desired sealing value or range of values. Specifically the Specification states:

> "[w]hen the sensed temperature exceeds a predetermined value or range of values, the control board reduces the duration of the impulse a predetermined amount. One method for determining an appropriate temperature above which is considered excessive, thereby triggering the reduction of impulse current duration, is to determine the impulse current duration time set by the operator. From the impulse duration time selected, based on the experience the operator can estimate the appropriate temperature of the sealing element (based, for example, on the nature of the film and the operating speed), and a suitable temperature above this estimated temperature is chosen above which would be considered excessive. A similar operation can be carried out to determine the minimum temperature necessary to effectuate a seal. . . . [t]he controller then can be instructed to reduce the impulse duration by a certain amount ("AdjustBy"), e.g., 0.2 seconds, if the mounting block temperature sensed exceeds the

> desired temperature range. . . . Similarly, if the temperature is below the desired value or range of values (i.e., below "AdjustStop"), the impulse duration can be increased, such as by increments of 0.2 seconds, until the desired value or range of values is achieved." (Specification 9-11).

Jurrius describes a sealing apparatus that fuses polymeric materials together (col. 1:14-20). The apparatus includes a variable temperature by the heating elements. If the desired heating temperature has not been reached, the controller (48) engages a solid state relay which engages a variable power controller that supplies power to the heating for adjusting the temperature (col. 9:12-33).

Principles of Law

A claimed invention is anticipated under 35 U.S.C. § 102 when all of the elements of the claimed invention are found in one reference. See *Scripps Clinic & Research Found. V. Genentech Inc.,* 927 F.2d 1565, 1576, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991). The prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently. *In re Schreiber,* 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1433 (Fed. Cir. 1997).

An "apparatus claims cover what a device is, not what a device does." *Hewlett -Packard Co. v. Bausch & Lomb, Inc*., 909 F.2d 1464, 1468, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). Therefore, the patentability of an apparatus claim depends on the claimed structure, not on the use or purpose of that structure, or the function or result of that structure. *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997); *In re*

Gardiner, 171 F.2d 313, 315-16, 80 USPQ 99, 101 (CCPA 1948). If the prior art structure possesses all the claimed characteristics including the capability of performing the claimed function, then there is a prima facie case of unpatentability. *In re Ludtke*, 441 F.2d 660, 664, 169 USPQ 563, 566-67 (CCPA 1971).

Analysis

The present record establishes that Jurrius teaches a sealing apparatus that comprises a controller that detects when the sealing element is too hot or is becoming too hot, and responds by reducing or terminating the heating of the sealing element. Appellants contend that Jurrius discloses the temperature is monitored and controlled only during the heating portion of each cycle (Br. 7, 10). In support of this position, Appellants argue that the language "adapted to" restricts the controller to specific parameters and therefore is a structural limitation and that Jurrius does not function to continuously maintain the temperature of the sealing element within the temperature range for effective sealing of a film over a plurality of sealing cycles (Reply Br. 4). It is undisputed that Jurrius describes a sealing apparatus that comprises a controller for monitoring the temperature of the heating element. Contrary to Appellants' arguments, Jurrius discloses that the controller (48) also monitors the temperature during the cooling cycle. *(*See col. 9: 40-53). The claim language does not preclude the sensor from monitoring the temperature both during heating and cooling process cycles. Thus, we determine that the Examiner has a reasonable basis to believe that Jurrius teaches a sealing apparatus that comprises a controller that is capable

of detecting and maintaining the temperature of the sealing element within a temperature range for effective sealing of films over a plurality of sealing cycles. Appellants have not adequately rebutted the Examiner's position by presenting evidence that establishes that the controller described by Jurrius is not capable of functioning to continuously maintain the temperature of the sealing element within a temperature range effective for the sealing of films over a plurality of sealing cycles.

Appellants' arguments regarding claims 2 and 10 are not persuasive. As to claim 2, Appellants argue that the invention of Jurrius is not the same because the temperature sensor (66) is located on the plate (30) that senses the temperature for regulating the cooling tubes (Br. 8). Jurrius discloses the use of a variable temperature sensor for detecting the temperature during the heating sequence in addition to the cooling sequences Jurrius discloses temperature sensors on plates (14) and (30) functions to hold the materials to be fused and provides the temperature for both heating and cooling sequences. (See col. 5, ll. 56-60; col.6, ll. 7-11; and col. 9, ll.13-33).As to claim 10, Appellants' arguments are not persuasive because they are directed to the function of the apparatus and not to the structure of the apparatus. Moreover, Appellants have not indicated how the temperature controller of Jurrius is not capable of functioning as specified in the claim.

As for the § 103 rejections of claims 1-11 and 16, Appellants have not adequately rebutted the reasonable position articulated by the Examiner in

the Answer.[1] The Examiner cited the Lunden reference for describing the operation of a controller unit and other references for teaching various aspects of the claimed invention. The addition of the teachings of Lunden and the other references do not detract from the teachings of Jurrius discussed above. Appellants' statement "[c]laim 9 is believed to be patentable by virtue of its dependence, for the reasons articulated above with respect to the claim 1 which it depends" is not a substantive argument which sets forth why the differences would have been nonobviousness to one of ordinary skill in the art within the meaning of § 103. We also note that Appellants base no argument upon objective evidence of nonobviousness, such as unexpected results.

Conclusion of Law

In conclusion, based on the foregoing and the reasons well stated by the Examiner, the Examiner's decision rejecting the appealed claims is affirmed.

Decision

The decision of the Examiner rejecting claims 1, 2, 5, 6, 10, 11, and 16 under 35 U.S.C. §102(b) as anticipated by Jurrius is affirmed.

The decision of the Examiner rejecting claims 1, 2, 5, 6, 10, 11, and 16 under 35 U.S.C. §103(a) over Jurrius in view of Lunden is affirmed.

[1] The Examiner has included multiple § 103 rejections that all include Jurrius alone or in combination with other references.

The decision of the Examiner rejecting claims 3 and 4 under 35 U.S.C. § 103 (a) over either Jurrius or Jurrius in view of Lunden, and further in view of the admitted prior art at pages 1-3 of the Specification is affirmed.

The decision of the Examiner rejecting claims 7 under 35 U.S.C. § 103(a) over either Jurrius or Jurrius and Lunden is affirmed.

The decision of the Examiner rejecting claims 1-8, 10, 11 and 16 under 35 U.S.C. §103(a) over the admitted prior art and Jurrius and optionally Lunden is affirmed.

The decision of the Examiner rejecting claims 9 under 35 U.S.C. §103(a) over either Jurrius or the admitted prior art, and further in view of Perret 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).

AFFIRMED

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