

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 27

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MAURICE TEMPE

Appeal No. 94-0680
Application 07/476,784¹

ON BRIEF

MAILED

MAY 9 - 1996

PAT. & T.M. OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

Before JOHN D. SMITH, GARRIS and ELLIS, Administrative Patent Judges.

JOHN D. SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 35 through 42 and 45 through 59.

¹ Application for patent filed February 8, 1990.

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Claim 35 is representative and is reproduced below:

35. Method for ventilating and controlling biological dehydration and stabilization treatment of a moist fermentable organic product or products comprising the steps of:

loading a reactor with a heap of the product or products to be treated;

applying suction or aspiration from beneath the heap to cause a flow of air through the heap at a desired flow rate;

measuring the temperature of air exhausted from the heap by expansion and contraction of a liquid having a high coefficient of thermal expansion;

programming a theoretical exhaust air temperature as a function of airflow rate;

comparing the theoretical value of the exhaust air temperature with a monitored exhaust air temperature and determining the deviation;

adjusting the exhaust airflow rate in response to the expansion or contraction of the liquid in such a manner that the monitored exhaust air temperature tends to reduce the magnitude of the deviation; and

thereby allowing fermentation while progressively reducing moisture from the product or products.

The references of record relied upon by the examiner are:

Schulze ('448)	3,138,448	Jun. 23, 1964
Schulze ('732)	3,285,732	Nov. 15, 1966
Abson et al. (Abson)	3,314,765	Apr. 18, 1967
Engelmann	4,339,265	Jul. 13, 1982
Kneer	4,062,770	Dec. 13, 1977
Graefe	4,211,545	Jul. 8, 1980

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Appealed claims 35 through 40, 42, 45 through 48, 50 through 54, 58, and 59 stand rejected under 35 USC 103 over Kneer in view of Engelmann and Abson "with or without" Schulze '732. Claims 41 and 45 through 49 stand similarly rejected under 35 USC 103 as unpatentable over Kneer in view of Engelmann, Abson, and Schulze '732, further in view of Schulze '448. Claims 55 through 57 stand similarly rejected under 35 USC 103 as unpatentable over Kneer in view of Engelmann, Abson, Schulze '732, and Graefe.

We reverse.

The subject matter on appeal is directed to a method (appealed claims 35 through 41) and an apparatus (appealed claims 42 and 45 through 59) for controlling biological dehydration of a moist fermentable organic product or products (e.g., a compost pile) by applying suction or aspiration from beneath a heap of the product to cause a flow of air through the heap at a desired flowrate. Importantly, the airflow rate is controlled by measuring the temperature of the exhausted air, comparing the measured temperature to a theoretical exhaust air temperature, and then adjusting the exhaust airflow rate accordingly. Thus appellant's method allows for the fermentation of an organic product while progressively reducing moisture from the product.

The examiner's conclusion that the claims on appeal would have been obvious to a person of ordinary skill in the art is based primarily on the teachings in Kneer and Abson. For

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controlling a composting process, Kneer admittedly monitors the exhaust air. However, in contrast to the claimed invention which utilizes the exhaust air temperature as a control parameter, Kneer regulates the airflow rate by measuring the carbon dioxide and oxygen content of the exhaust air. See Kneer at column 3, line 67 to column 4, line 5 and column 5, lines 43 through 57. In like manner the composting process disclosed by Abson also controls the airflow rate based on the carbon dioxide content of an exhaust air stream. It is correct, as pointed out by the examiner that Abson measures the temperature of the exhaust gas. However, this parameter is used to control the water flow into the composting apparatus. See Abson at column 1, lines 18 through 24.

Apparently recognizing that none of the relied upon references teach the concept of the presently claimed invention, i.e., regulating the airflow rate based directly on a measured and compared exhaust air temperature, the examiner nonetheless holds the claimed subject matter to be prima facie obvious on the grounds that the combined teachings of the relied upon references would have suggested to the skilled artisan that there is a direct interrelationship between the parameters of temperature and moisture content of the decomposing materials and the temperature, moisture content, oxygen, and carbon dioxide

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contents of the gas supplied to the pile and of the exhaust gases leaving the pile. See the Answer at pages 3 and 4.

That there may be some implied interrelationship between each of the parameters mentioned by the examiner, above, is factually inadequate in our view, to support a finding that one would have utilized the exhaust air temperature, in lieu of the carbon dioxide content of the exhaust gas as taught by Kneer and Abson, as a means for controlling airflow in a composting process as claimed. It is well settled that obviousness is a legal conclusion which must be based on facts, not speculation and generalizations. In re Freed, 425 F.2d 785, 165 USPQ 570 (CCPA 1970); In re Warner, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967), cert. denied, 389 U.S. 1057 (1968). In the situation before us, the examiner has not discharged his initial burden of providing a factual basis upon which to conclude that one having ordinary skill in the art would have been led to modify the Kneer process by controlling the airflow rate therein based on the measured exhaust air temperature.

Further, as argued by appellant, the appealed claims require measuring the temperature of the exhausted air from a heap by expansion and contraction of a liquid having a high coefficient of thermal expansion with the subsequent adjusting of the exhaust airflow rate in response to the expansion or contraction of that liquid. See the specification at pages 12

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through 14 and Figure 6 of the application. These claim requirements have been ignored by the examiner, and it is not apparent that there is any disclosure in any of the relied upon references involving temperature measurement and exhaust airflow rate adjustment "in response to the expansion or contraction of a liquid having a high coefficient of thermal expansion" (claim 35). Thus even if a person of ordinary skill in the art had been motivated to modify the Kneer process in the manner proposed by the examiner, it is not readily apparent that one would arrive at the claimed method and apparatus defined by the appealed claims. Compare Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1439 (Fed. Cir. 1988), cert. denied, 488 U.S. 825 (1988).

Finally, we note appellant's acknowledgment that the novelty of his invention lies in the simplified method of controlling the airflow rate applied to the heap based solely on the temperature of the air exhausted from the heap. See the Brief at pages 3 and 4. However, we find it necessary to caution against being lured to a conclusion of obviousness by the simplicity of a claimed invention. Jones v. Hardy, 727 F.2d 1524, 220 USPQ 1021 (Fed. Cir. 1984). Often, the very simplicity of an invention can constitute evidence of nonobviousness. In re Van Wanderham, 378 F.2d 981, 154 USPQ 20 (CCPA 1967).

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Accordingly, the decision of the examiner is reversed.

REVERSED

John D. Smith
JOHN D. SMITH)
Administrative Patent Judge)
Bradley R. Garris
BRADLEY R. GARRIS)
Administrative Patent Judge)
Joan Ellis
JOAN ELLIS)
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