Paper No. 43

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CARL N. BARON, STEPHEN L. MERKEL,
and ROBERT C. HALL

Appeal No. 96-0417
Application No. 07/951,308[1]

HEARD: July 13, 1999

Before PAK, OWENS, and KRATZ, Administrative Patent Judges.

KRATZ, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's refusal to allow claims 33 through 47, which are all of the claims pending in this application.

BACKGROUND

[1] Application for patent filed September 24, 1992. According to appellants, this application is a continuation of Application 07/791,151, filed November 13, 1991, now abandoned; which is a division of Application 07/367,388, filed June 16, 1989, now U.S. Patent No. 5,065,695.

The appellants' invention relates to a method of dispensing a fluid having a non-linear characteristic of flow onto a work piece in a controlled manner in response to a corrected (linearized) compensated signal. According to appellants, "[t]he invention provides for a more uniform bead size and linear deposition rate of coating material, improved economy of material, and improved quality of the coated product (specification, page 8, lines 11-14). An understanding of the invention can be derived from a reading of exemplary claims 33 and 43 (the only independent claims on appeal), which are reproduced below.

33. A method of maintaining a controlled relationship between a variable input signal and the actual dispensing rate of a fluid having a non-linear characteristic of flow from a dispensing device, the method comprising the steps of:

dispensing fluid from the device onto a workpiece by:

(1) receiving an input signal;

(2) modifying the received input signal as a function of a measurement of a first flow of the fluid from the device to produce a compensated signal;

(3) correcting the compensated signal with stored correction data to generate a corrected compensated signal to produce the actual dispensing rate having the controlled relationship to the received input signal; and

(4) operating the dispensing device in response to the control signal to dispense a second flow of fluid onto the workpiece in the controlled relationship to the received input signal.

43. A method of compensating for flow characteristics of a fluid being dispensed from a device onto a workpiece, the method comprising the steps of:

receiving an input signal;

modifying and correcting the received input signal to reduce flow non-linearities introduced by the flow characteristics from the device and to compensate for viscosity changes of the fluid by:

modifying the input signal as a function of a fluid flow measurement to produce a compensated signal; and

correcting the compensated signal as a function of the flow characteristics of the fluid through the device to produce a linearized compensated signal; and

dispensing fluid onto a workpiece under the control of the linearized compensated signal.

The sole prior art reference of record relied upon by the examiner in rejecting the appealed claims is:

Price 4,922,852 May 08, 1990
(102(e) date as of the effective filing date - Oct. 23, 1986)

Claims 33-47 stand rejected under 35 U.S.C. § 103 as being unpatentable over Price.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejection, we make reference to the examiner's answer for the examiner's reasoning in support of the rejection, and to the appellants' brief (Paper No. 35, filed March 31, 1995) and reply brief (Paper No. 37½, filed August 17, 1995) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we *reverse* this rejection for reasons which follow.

At the outset, we note that the examiner must shoulder the initial burden of presenting a *prima facie* case of obviousness based on the disclosure of the applied prior art. *See In re Oetiker,* 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

Each of the appealed claims requires the sequential performance of several steps as part of a fluid dispensing process. The method of claim 33 requires the sequence of: receiving an input signal; producing a compensated signal from the received input signal based on a measurement of a first flow of the fluid; and correcting the produced compensated signal utilizing stored data to form an actual dispensing rate (linearized signal) that is used as the control signal for a dispensing device. The method of the other independent claim 43 describes a similar technique for dispensing fluid onto a work piece.

The examiner cites Price for modifying "the input signal by data collected from a fluid flow measurement as well as stored correction data" (answer, page 4). According to the examiner, "a person having ordinary skill in the art at the time of the claimed invention would have found it obvious to modify Price by performing the modifying and correcting steps individually because by changing the input signal by only one variable at a time (as opposed to several) would make it easier to identify potential program bugs" (answer, page 4).

Appellants argue that the art cited by the examiner does not teach or suggest the method steps claimed (main brief, pages 7-10 and reply brief, pages 1-4). We likewise find that the examiner has failed to point out any disclosure or teaching suggesting the claimed process steps by Price. We agree with appellants (reply brief, page 3) that the method taught by Price teaches a sequence of steps that differs from appellants' method in that Price teaches linearization of an input signal prior to modifying the linearized signal for a flow (viscosity) compensation (column 10, lines 45 - column 11, line 2).

The examiner appears to conclude that it would have been obvious to one of ordinary skill in the art to perform the signal linearization correction or the flow property (viscosity) signal compensation first from the disclosure of Price (answer, page 7). However, the examiner presents no factual basis for supporting this conclusion. In fact, the process of Price teaches a contrary order for correction and compensation of the signal as indicated above.

"Where the legal conclusion [of obviousness] is not supported by facts it cannot stand." *In re Warner,* 379 F.2d

1011, 1017, 154 USPQ 173, 178 (CCPA 1967). For the foregoing reasons, we conclude that the examiner has not met the initial burden of presenting a case of *prima facie* obviousness.

Accordingly, the rejection of claims 33-47 under 35 U.S.C. § 103 as unpatentable over Price is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

REVERSED

CHUNG K. PAK Administrative Patent Judge	)	
TERRY J. OWENS Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
PETER F. KRATZ Administrative Patent Judge	)	

tdc

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APPEAL NO. - JUDGE KRATZ
APPLICATION NO. 07/951,308

APJ KRATZ

APJ PAK

APJ OWENS

DECISION: **REVERSED**

Prepared By: TINA

DRAFT TYPED: 17 Nov 00

FINAL TYPED: