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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ANDREAS FISCHER,
RALPH GLASER, and CARMEN GOLTZ

Appeal 2018-005075
Application 14/345,706
Technology Center 1700

Before KAREN M. HASTINGS, MICHAEL P. COLAIANNI, and GEORGE C. BEST, *Administrative Patent Judges*.

BEST, *Administrative Patent Judge*.

DECISION ON APPEAL

The Examiner finally rejected claims 30–33 and 37–40 of Application 14/345,706. Final Act. (May 30, 2017). Appellant[1] seeks reversal of these rejections pursuant to 35 U.S.C. § 134(a). We have jurisdiction under 35 U.S.C. § 6.

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[1] We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42. Appellant defines the real party in interest as Dürr Systems GmbH. Appeal Br. 3.

An oral hearing in this appeal was held on September 12, 2019. A transcript of that hearing will be placed in the record of the '706 Application when it becomes available.

For the reasons set forth below, we ***reverse***.

BACKGROUND

Motor vehicle body parts are conventionally painted with rotary atomizers. Spec. ¶ 3. Rotary atomizers are used because they produce an approximately rotationally symmetric spray jet. *Id.* In practice, however, the spray jets are not exactly rotationally symmetric due to deformation by external forces, e.g., gravity, electrostatic forces, and flow forces. *Id.* ¶ 5. This asymmetry results in the application of a paint layer that has in a regular thickness. *Id.* ¶ 6.

The '706 Application describes a method for coating a surface with a coating agent, e.g., painting and motor vehicle body part with paint, and an apparatus for performing that method. *Id.* ¶ 2. The apparatus and method are said to compensate for the asymmetry of the spray jet, thereby reducing the asymmetry of the resulting spray pattern on the motor vehicle part surface. *Id.* ¶ 8.

Claim 30—the sole independent claim on appeal—is representative of the '706 Application's claims and is reproduced below from the Claims Appendix of the Appeal Brief.

> 30. A coating device for coating a component surface with a coating agent, comprising:
>
> an atomizer configured to dispense a spray jet of a coating agent onto the component surface, such that the spray jet, when dispensed, has a main axis and an asymmetry with respect to the main axis, whereby the spray jet on the component surface generates a spray pattern with a

> corresponding asymmetry; the atomizer being operated with different distrubance [sic] variables includes [sic, including] a movement speed and *a variable guide air speed*; and
>
> a compensation device that receives as input values the disturbance variable [sic] and configured to at least partially compensates [sic] for the asymmetry of the spray jet, whereby the asymmetry of the spray pattern is reduced.

Appeal Br. 10.[2]

REJECTIONS

On appeal, the Examiner maintains the following rejections:

1. Claim 30 is rejected under 35 U.S.C. § 102(b) as anticipated by Vardelle.[3] Answer 2−3.
2. Claims 31–33, 37, and 38 are rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Vardelle and Robinson.[4] Answer 3−4.
3. Claims 39 and 40 are rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Vardelle and Robinson. Answer 5.

DISCUSSION

Rejection 1. The Examiner rejected claim 30 as anticipated by Vardelle. Answer 3.

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[2] If prosecution of the ’706 Application continues, Appellant should consider correcting the typographical and grammatical errors that are present in at least claims 30 and 40.

[3] US 2005/0199603 A1, published September 15, 2005.

[4] US 3,563,474, issued February 16, 1971.

Appellant argues for reversal of this rejection on the basis of two alleged errors: the Examiner erred by finding that (1) Vardelle's "gas flow" is the same as the claimed "guide air" and (2) Vardelle discloses a computer that receives disturbance variables as inputs in real time. Appeal Br. 4–5.

Vardelle describes a thermal spraying apparatus. Vardelle ¶ 1. Thermal spraying is a method for coating a surface with a high melting point material, such as a metal or metal alloy. *Id.* ¶¶ 2, 4. It comprises using a torch to produce a high-speed gas flow and melting the material in the hot gas flow. *Id.* ¶ 2. The hot gas flow atomizes the material into small droplets, which are entrained in the gas flow. *Id.* The mixture of the high-speed gas flow and molten material is referred to as a jet. *Id.* The jet is directed toward the surface. *Id.* The entrained molten droplets impinge upon the surface, adhering and solidifying in contact with it. *Id.*

Among other things, thermal spraying methods vary according to the type of torch used to heat the gas flow and melt the material. *Id.* ¶¶ 5–10. The product quality of the process depends, in part, on the settings of the torch:

> The material flow rate, for example in grams per minute, is clearly a parameter common to all the torches. In the case of flame spraying, it is also necessary to set the flow rate of combustible and oxygen gases expressed, for example, in liters per minute. In the case of arc wire spraying, it is also necessary to set the arc intensity in amperes and the gas flow rate. In the case of arc plasma spraying, it is also necessary to set the arc intensity, the flow rate of the plasma-generating gas and the flow rate of carrier gas.

Id. ¶ 12.

In rejecting claim 30, the Examiner found that

> Vardelle et al. further discloses that two of those supply parameters are the movement of the torch (see claim 1) and *the*

> *carrier gas flow rate, which is a variable guide air speed,* and teaches that the computer (100) receives the supply parameters as inputs in real time in order to control the compensations and corrections (pars. 45-46, 50, 69).

Answer 3 (emphasis added).

We agree with Appellant that this finding is erroneous and based upon an unduly broad interpretation of the claim term "guide air." The Examiner's finding would be correct only if the term "guide air" encompasses a gas flow that is part of the spray jet. A review of the '706 Application's Specification, however, demonstrates that such an interpretation is unreasonably broad.

In addressing Appellant's arguments, the Examiner explains that "the term 'guide air' is not an art-recognized terms for shaping air, which is the correct phrase to describe air being provided externally from a spray jet in order to control its shape and spread." Answer 6. Because the term "guide air" is not a term of art in this field, we turn to the Specification for guidance as to its meaning. *See In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004) (explaining that the words used in a claim must be read in light of the specification, as it would have been interpreted by one of ordinary skill in the art at the time of the invention). We are mindful that:

> [t]he correct inquiry in giving a claim term its broadest reasonable interpretation in light of the specification is not whether the specification proscribes or precludes some broad reading of the claim term adopted by the examiner. And it is not simply an interpretation that is not inconsistent with the specification. It is an interpretation that corresponds with what and how the inventor describes his invention in the specification, i.e. an interpretation that is consistent with the specification.

In re Smith Int'l, Inc., 871 F.3d 1375, 1382–83 (Fed. Cir. 2017) (internal quotation omitted); *see also In re Baker Hughes, Inc.*, 215 F.3d 1297, 1303

(Fed. Cir. 2000) (the PTO cannot adopt a construction that is "beyond that which was reasonable in light of the totality of the written description" in the Specification).

In this case, the '706 Application's Specification makes it clear that the term "guide air" refers to a stream of gas that impinges upon the conical spray jet. *See, e.g.*, Spec. ¶¶ 10, 11, 15.

Vardelle does not describe any gas stream that impinges on its jet. Vardelle, therefore, cannot describe guide air speed as a disturbance variable. Nor can it describe the claimed "compensation device that receives as input values the disturbance variable[s]" including the guide air speed.

In view of the foregoing, we determine that the rejection of claim 30 as anticipated by Vardelle must be reversed.

Rejections 2 and 3. Appellant argues that dependent claims 31–33 and 37–40, which depend from claim 30, are patentable for the same reasons they presented with respect to claim 30. Appeal Br. 7. We have reversed the rejection of claim 30, and the Examiner has not found that Robinson cures the deficiency in Vardelle's disclosure. Thus, we also reverse the rejection of claims 31–33 and 37–40.

CONCLUSION

In summary:

Claims Rejected	Basis	Affirmed	Reversed
30	§ 102(b) Vardelle		30
31–33, 37, and 38	§ 103(a) Vardelle and Robinson		31–33, 37, and 38

Claims Rejected	Basis	Affirmed	Reversed
39 and 40	§ 103(a) Vardelle and Robinson		39 and 40
Overall Outcome			30–33 and 37–40

REVERSED