

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

WAGNER SPRAY TECH CORPORATION,  
Petitioner,

v.

GRACO MINNESOTA INC.,  
Patent Owner.

---

Case PGR2018-00049  
Patent 9,675,982 B2

---

Before LINDA E. HORNER, MICHAEL L. WOODS, and  
SEAN P. O'HANLON, *Administrative Patent Judges*.

WOODS, *Administrative Patent Judge*.

DECISION  
Denying Institution of Post-Grant Review  
*37 C.F.R. § 42.208*

## I. INTRODUCTION

Wagner Spray Tech Corporation (“Petitioner”) filed a Petition (Paper 1, “Pet.”) requesting post-grant review of all claims (claims 1–17) of U.S. Patent No. 9,675,982 B2 (Ex. 1001, “the ’982 patent”). Pet. 7; Ex. 1001, 7:64–10:45. Graco Minnesota Inc. (“Patent Owner”) filed a preliminary response (Paper 9, “Prelim. Resp.”) to the Petition.

A post-grant review may not be instituted unless “the information presented in the petition filed under section 321, if such information is not rebutted, would demonstrate that it is more likely than not that at least 1 of the claims challenged in the petition is unpatentable.” 35 U.S.C. § 324(a). For the reasons set forth below, the Petition fails to demonstrate that it is more likely than not that any of the challenged claims is unpatentable. Accordingly, we do not institute post-grant review of any claim of the ’982 patent.

### *A. Related Proceedings*

The parties represent that there are no related matters before the Board or in a Federal Court. Pet. 8; Paper 3, 1. The parties represent, however, that the parent application to the ’982 patent (U.S. Application No. 15/022,044) is still pending before the Office. Pet. 8; Paper 3, 1.

### *B. The ’982 Patent (Ex. 1001)*

The ’982 patent is entitled “Spray Tip and Method of Manufacture” and describes a spray tip for use in paint spraying, for example. Ex. 1001, [54], 1:19–25. In particular, the ’982 patent states that its spray tip improves

the uniformity of a spray pattern by *increasing the turbulence* of the fluid (e.g., paint). *See id.* at 3:53–57. By increasing the turbulence, the '982 patent describes that undesirable “tails” or high concentration of fluid at the fringe of the spray pattern is reduced. *See id.* at 3:57–60. To illustrate an embodiment of the '982 patent, we reproduce Figure 2, below:

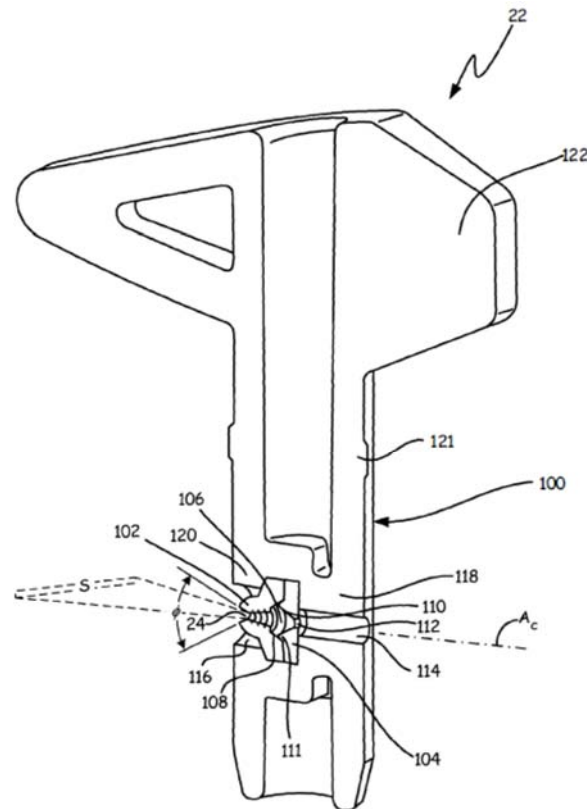
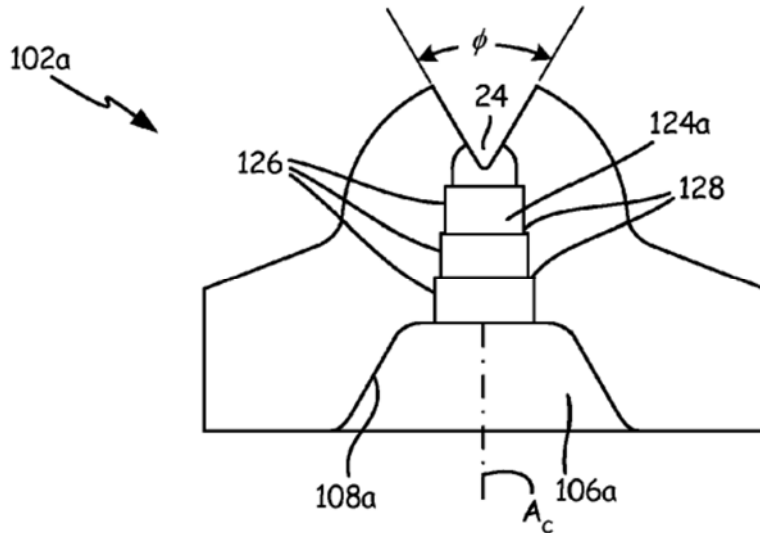


FIG. 2

According to the '982 patent, Figure 2 illustrates a cross-sectional perspective view of a spray tip. Ex. 1001, 2:4–5. Specifically, Figure 2 depicts spray tip 22 with tip body 100, tip piece 102, and pre-orifice piece 104. *Id.* at 3:15–17. Tip piece 102 and pre-orifice piece 104 include chamber surfaces 108 and 110 that define turbulating chamber 106. *Id.* at

3:17–19. To illustrate particular turbulating features that are at issue in this decision, we reproduce Figure 3A, below (*see id.* at 3:63–65):



**FIG. 3A**

Figure 3A depicts a cross-sectional view of one of three alternative embodiments of the '982 patent's tip piece, denoted here as tip piece 102a. *Id.* at 4:20–22. As shown above, tip piece 102a depicts outlet passage 124a with a plurality of cylindrical sections, denoted as 126, with steps 128 converging from turbulating chamber 106a to outlet orifice 24. *Id.* at 4:30–33. Figure 3A also depicts turbulating chamber 106a as having a conical or frustoconical wall at chamber surface 108a. *Id.* at 4:33–35. Cylindrical sections 126 and steps 128 “*further turbulate fluid flow from turbulating chamber*” 106a to its outlet aperture, thereby reducing pressure loss across outlet orifice 24. *Id.* at 4:36–38 (emphasis added).

### *C. Illustrative Claim*

Claims 1, 16, and 17 are independent, with claims 2–15 depending directly or indirectly from claim 1. Ex. 1001, 7:64–10:45. We reproduce

claim 1, below, with emphases added to limitations discussed in this  
Decision:

1. A spray tip for atomizing a fluid in a spray, the spray tip comprising:

a tip body, the tip body having a cylindrical portion having an exterior circumference, the cylindrical portion having an aperture that extends through the cylindrical portion, the aperture having a pair of openings respectively located on opposite sides of the exterior circumference, wherein the fluid moves through the aperture in an upstream to downstream orientation;

a pre-orifice piece located in the aperture of the tip body, the pre-orifice piece having an inlet passage and a chamber section, the inlet passage located upstream of the chamber section, the inlet passage is narrower than the chamber section; and

a *tip piece* located in the aperture of the tip body downstream of the pre-orifice piece and *abutting the pre-orifice piece*, the tip piece having a stepped section and an outlet aperture, the outlet aperture downstream of the stepped section, the outlet aperture is narrower than the stepped section, the *stepped section comprising a plurality of cylindrical steps*, the plurality of cylindrical steps arranged sequentially converging from widest upstream and narrowing downstream toward the outlet aperture,

wherein the pre-orifice and the tip piece together form a turbulating chamber that is located between the inlet passage and the outlet aperture and the fluid flows through each of the inlet passage, the chamber section, and the stepped section before being released through the outlet aperture as the spray, and

wherein the tip piece and the pre-orifice piece fully define the turbulating chamber, *the chamber section of the pre-orifice piece has an upstream frustoconical surface* that widens in a downstream direction and that defines an upstream portion of the turbulating chamber, and the tip piece has a downstream frustoconical surface of the turbulating chamber that narrows in the downstream direction and that defines a downstream portion of the turbulating chamber.

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.