UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

POWER-PACKER NORTH AMERICA, INC. *d/b/a* GITS MANUFACTURING CO., Petitioner,

v.

G.W. LISK CO., INC., Patent Owner.

Case IPR2017-02035 Patent 6,601,821 B2

Before BART A. GERSTENBLITH, GEORGE R. HOSKINS, and TIMOTHY J. GOODSON, *Administrative Patent Judges*.

 ${\tt GERSTENBLITH}, Administrative\ Patent\ Judge.$

FINAL WRITTEN DECISION 35 U.S.C. § 318(a); 37 C.F.R. §42.73



I. INTRODUCTION

A. Background

Power-Packer North America, Inc. *d/b/a* GITS Manufacturing Co. ("Petitioner") filed a Petition (Paper 1, "Pet.") requesting institution of *inter* partes review of claims 12–22 of U.S. Patent No. 6,601,821 B2 (Ex. 1101, "the '821 patent"). G.W. Lisk Company, Inc. ("Patent Owner") filed a Preliminary Response (Paper 6). The Petition asserts the following grounds:

Ground	Reference(s)	Basis	Claim(s) challenged
1	Martin ¹	§ 102	12–22
2	Martin	§ 103(a)	19
3	Martin and Oleksiewicz ²	§ 103(a)	19
4	Eggers ³	§ 102	12, 13, and 16–18
5	Eggers and Martin	§ 103(a)	12–22

Pet. 3.

We instituted an *inter partes* review of all claims challenged in the Petition, but on only a subset of the asserted grounds—Grounds 1 and 4. *See* Paper 7, 40 ("Dec. on Inst."). Specifically, we determined based on the preliminary record that Petitioner had demonstrated a reasonable likelihood of prevailing in all of its challenges, except for the challenges to claim 19 in Grounds 2 and 3 and claims 12–22 in Ground 5. *Id.* at 28–30, 36–40. In accordance with the Board's practice at that time, we instituted review only

³ German Published Examined Application No. 1268494, published May 16, 1968 (Ex. 1103). Exhibit 1104 ("Eggers") is the English-language translation, and also includes a certificate of translation.



¹ U.S. Patent No. 4,201,116, issued May 6, 1980 (Ex. 1102, "Martin").

² U.S. Patent No. 6,006,732, issued Dec. 28, 1999 (Ex. 1107,

[&]quot;Oleksiewicz").

on the challenges for which Petitioner showed a reasonable likelihood of prevailing. Subsequently, pursuant to *SAS Institute, Inc. v. Iancu*, 138 S. Ct. 1348, 1355–57 (2018),⁴ we modified the Decision on Institution to institute review of all grounds and claims presented in the Petition. Paper 9.

After institution of trial, Patent Owner filed a Patent Owner Response (Paper 15, "PO Resp."), and Petitioner filed a Reply (Paper 22, "Reply"). Petitioner supports its arguments with a declaration by Mr. Thomas J. Labus, dated August 30, 2017 (Ex. 1105, "the Labus Declaration"). Patent Owner supports its Response with a declaration by Dr. Kevin C. Craig, dated June 22, 2018 (Ex. 2103, "Second Craig Declaration"). Patent Owner submitted a Motion for Observations on Cross-Examination of Kevin C. Craig, Ph.D. (Paper 24), and Petitioner submitted a Response to Patent Owner's Motion for Observations (Paper 25). Oral argument was held on December 12, 2018, a transcript of which is included in the record. Paper 28 ("Tr.").

We have jurisdiction under 35 U.S.C. § 6. Petitioner bears the burden of proving unpatentability of the challenged claims, and the burden of persuasion never shifts to Patent Owner. *Dynamic Drinkware*, *LLC v. Nat'l*

⁶ We held oral argument in this case contemporaneously with oral argument in related case IPR2017-02034, creating a single transcript for both cases.



⁴ See also "Guidance on the Impact of SAS on AIA Trial Proceedings" (April 26, 2018), available at https://www.uspto.gov/patents-application-process/patent-trial-and-appeal-board/trials/guidance-impact-sas-aia-trial (explaining that a decision granting institution will institute on all challenged claims and on all grounds presented in a petition).

⁵ Patent Owner previously submitted a declaration by Dr. Craig (Ex. 2101, "First Craig Declaration") with its Preliminary Response and continues to rely on the First Craig Declaration in support of its Response. *See*, *e.g.*, PO Resp. 30 (citing Ex. 2101, 13–14).

Graphics, Inc., 800 F.3d 1375, 1378 (Fed. Cir. 2015). To prevail, Petitioner must prove unpatentability by a preponderance of the evidence. See 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d). This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons that follow, we determine that Petitioner has shown by a preponderance of the evidence that claims 12, 13, 16–18, and 20–22 of the '821 patent are unpatentable, but has not shown by a preponderance of the evidence that claims 14, 15, and 19 are unpatentable. See 35 U.S.C. § 316(e).

B. Related Proceedings

The '821 patent is the subject of an action between the parties in *G.W. Lisk Co. v. GITS Manufacturing Co.*, No. 17-cv-00273 (S.D. Iowa). Pet. 74; Paper 4, 2. Additionally, Petitioner challenges the patentability of claims 1–11 of the '821 patent in IPR2017-02034. Paper 4, 2.

C. Real Parties in Interest

The Petition identifies "Actuant Corporation and Power-Packer North America, Inc. *d/b/a* GITS Manufacturing Co." as the real parties in interest. Pet. 74. Patent Owner identifies itself, "G.W. Lisk Company, Inc.," as the sole real party in interest. Paper 4, 2.

D. The '821 Patent

The '821 patent is directed to "[a] two-stage proportional control valve assembly [that] regulates flow of a first fluid such as an engine exhaust gas using a second fluid such as engine oil for power." Ex. 1101, [57]. The '821 patent explains that the two-stage proportional flow control valve assembly is "particularly useful for regulating exhaust flow rates in exhaust gas re-circulating systems of internal combustion engines." *Id.* at 1:29–32. In short, exhaust gas recirculating valves divert metered amounts of exhaust



gas to intake manifolds where exhaust gas is mixed with fresh air/fuel mixtures before being re-burned by the engine. *Id.* at 1:19–22. This recirculating process results in a lowering of combustion temperature and reduction of harmful compounds, thus lowering harmful emissions. *Id.* at 1:16–19, 1:22–25.

Figure 2 of the '821 patent is reproduced below:

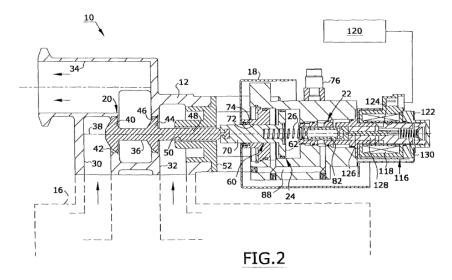


Figure 2 of the '821 patent is a side, cross-sectional view through an exemplary exhaust gas re-circulation valve. *Id.* at 3:42–44.

As shown in Figure 2, two-stage proportional control valve assembly 10 has housing 12 that can be attached to an internal combustion engine exhaust manifold 16. *Id.* at 3:50–55. Within housing 12 is exhaust valve 20 and four-way servovalve 22 interconnected in succession by double-acting cylinder 24 and feedback compression spring 26. *Id.* at 3:55–58. Exhaust valve 20 regulates flows between two exhaust gas inlet passages 30 and 32 and a combined exhaust gas outlet passage 34 formed within housing 12. *Id.* at 3:61–63. Exhaust gas outlet passage 34 directs a metered flow of the exhaust gases toward an engine inlet manifold (not shown in Figure 2). *Id.* at 3:65–67. Flows between exhaust gas inlet



DOCKET

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.

