

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TITEFLEX CORPORATION,
Petitioner,

v.

GOODSON HOLDINGS, LLC,
Patent Owner.

Case IPR2016-00731
Patent 7,821,763 B2

Before KALYAN K. DESHPANDE, JUSTIN T. ARBES, and
KIMBERLY McGRAW, *Administrative Patent Judges*.

McGRAW, *Administrative Patent Judge*.

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

I. INTRODUCTION

In this *inter partes* review, instituted pursuant to 35 U.S.C. § 314, Titeflex Corporation (“Petitioner”) challenges the patentability of claims 1–7 of U.S. Patent No. 7,821,763 B2 (Ex. 1001, “the ’763 patent”), owned by Goodson Holdings, LLC. (“Patent Owner”). We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is entered pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons discussed below, we determine that Petitioner has shown by a preponderance of the evidence that claims 1–7 of the ’763 patent are unpatentable.

A. Procedural History

Petitioner filed a Petition requesting an *inter partes* review of claims 1–7 of the ’763 patent. Paper 1 (“Pet.”). Patent Owner filed a Preliminary Response. Paper 7 (“Prelim. Resp.”). On September 9, 2016, we instituted an *inter partes* review of claims 1–7 of the ’763 patent on certain asserted grounds of unpatentability. Paper 8 (“Dec. on Inst.”).

After institution of trial, Patent Owner filed a Patent Owner Response (Paper 11, “PO Resp.”) and Petitioner filed a Reply (Paper 14, “Reply”). A consolidated oral hearing for this proceeding and Case IPR2016-00730, involving the same parties and similar issues, was held on May 10, 2017. A transcript of the consolidated hearing has been entered into the record. Paper 19 (“Tr.”).

B. Related Proceedings

The parties state the ’763 patent is asserted in a patent infringement lawsuit filed by Patent Owner against Petitioner in the U.S. District Court

for the Northern District of Texas, Dallas Division, captioned *Goodson Holdings, LLC v. Titeflex Corporation*, Civil Action No. 3:15-cv-2153. Pet. 1; Paper 4, 2. The parties also identify Case IPR2016-00730, in which Petitioner seeks *inter partes* review of U.S. Patent No. 7,562,448 B2 (“the ’448 patent”), as a related matter. Pet. 1; Paper 4, 2.

C. The ’763 Patent

The ’763 patent is a divisional of the ’448 patent and is directed to methods and devices for preventing damage to household gas tubing, such as corrugated stainless steel tubing (“CSST”), from lightning strikes, appliance shorts, or other electrical charge going to ground. Ex. 1001, [62], Abstract, 3:39–44. The ’763 patent explains that the metal components of the gas tubing/pipe “are chosen for their ability to safely carry natural gas” but “have a propensity to fail when exposed to electrical insult, particularly lightning.” *Id.* at 1:46–48, 2:42–45. According to the ’763 patent, there was a need in the art “to have a CSST system” that “is capable of carry[ing] current in the case of electrical arcing or carrying fault currents without suffering perforation or melting at the connector end” and “to have a CSST” that “minimizes the chances of having perforations created on its side walls due to electric injury (i.e. from lightning and similar phenomenon).” *Id.* at 3:17–25.

To address these issues, the ’763 patent discloses a device having a conductive wire that provides a direct electrical contact between the end connectors. *Id.* at Abstract. The conductive ground wire can either be a single wire or multiple strands, such as a wire mesh. *Id.* at 3:37–38. An

embodiment having a single conductive grounding wire is shown in Figure 6A, reproduced below.

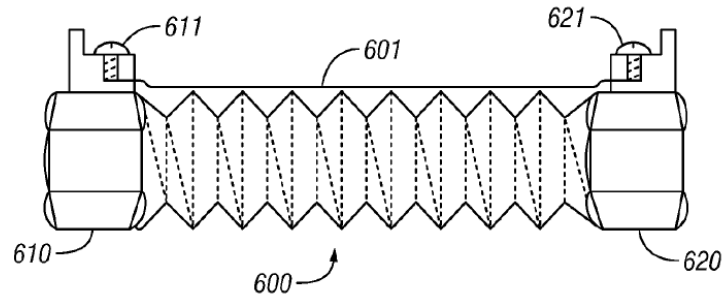


FIG. 6A

Figure 6A illustrates a CSST having a single “copper ground wire 601 of ~#8 American Wire Gauge (AWG) or larger electrically in parallel with the length of CSST or the appliance connectors 610, 620.” *Id.* at 5:9–14.

“[G]round wire 601 attaches to . . . end connectors 610, 620 at . . . set screws 611, 621 one on each end.” *Id.* at 5:14–16.

An alternative embodiment having “multiple strands of grounding wire” (e.g., a mesh) is shown below in Figure 6B. *Id.* at 4:7–8, 5:26–27.

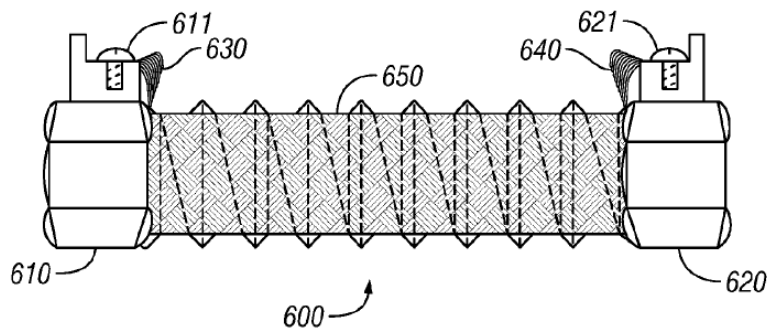


FIG. 6B

Figure 6B shows a CSST with multiple strands of grounding wire. “CSST flex line 600 is shrouded by . . . wire mesh 650, which is attached to

collars 630, 640 on each end.” *Id.* at 5:29–31. The ’763 patent explains that “[i]f an electrical charge goes to ground via the CSST or the appliance connector, such as from a lightning strike or an appliance short, *the majority of the current* is carried by the conductive wire rather than the CSST or appliance connector itself, thus preventing damage to the CSST from the current.” *Id.* at 3:39–44 (emphasis added). The ’763 patent further states that “[w]hen using a mesh type shield, if the CSST or appliance connector receives an electrical charge from arcing to the side walls, the mesh serves as a current shunt and thus both shunts the current and causes the charge on the actual CSST (or appliance connector) wall to be dissipated over a larger area.” *Id.* at 3:44–49.

Both embodiments keep “electrical current from damaging the flared ends of the CSST by providing an electrical shunt in the form of copper ground wire between the brass connectors on the ends.” *Id.* at 5:36–40. Because “copper is a superior conductor to CSST, it can safely carry currents that the CSST was never designed to handle.” *Id.* at 5:40–43.

D. Illustrative Claim

Petitioner challenges independent claim 1 and dependent claims 2–7. Claim 1 is reproduced below.

1. An electrical shunt for gas tubing comprising:
 - (a) connecting means at each end of the gas tubing for coupling the tubing to gas lines and appliances, wherein the connecting means are made of a conductive material that has a higher conductivity than the gas tubing; and
 - (b) conducting means for providing direct electrical contact between said connecting means at either end of the gas

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.