

NOTE: This disposition is nonprecedential.

## United States Court of Appeals for the Federal Circuit

2009-1532  
(Serial No. 10/908,004)

IN RE DEREK J. LACKEY

Gregory T. Zalecki, Law Offices of Gregory T. Zalecki, of Sterling Heights, Michigan, for appellant.

Raymond T. Chen, Solicitor, Office of the Solicitor, United States Patent and Trademark Office, of Arlington, Virginia, for the Director of the United States Patent and Trademark Office. With him on the brief were Benjamin D.M. Wood and Thomas L. Stoll, Associate Solicitors.

Appealed from: United States Patent and Trademark Office  
Board of Patent Appeals and Interferences

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DECIDED: April 9, 2010

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Before LOURIE, GAJARSA, and MOORE, Circuit Judges.

GAJARSA, Circuit Judge.

Appellant Derek J. Lackey (“Appellant”) filed a patent application with the United States Patent and Trademark Office (“PTO”) relating to metallic air admittance valves for use in plumbing systems. The PTO’s Board of Patent Appeals and Interferences (“Board”) held the patent claims invalid on multiple grounds, including that they would have been obvious at the time the invention was made. For the reasons stated below, we affirm the obviousness ruling and therefore sustain the Board’s decision without reaching the Board’s other grounds.

Appellant’s patent application is directed to metallic air admittance valves. An air admittance valve is a check valve that provides ventilation to plumbing system drain lines while preventing noxious gases from escaping the drain lines. The Appellant’s

specification discloses that an air admittance valve is essentially an air check valve that is usually attached near the trap of a fixture. The air admittance valve permits air flow into a drain waste vent system, thereby preventing the siphoning of a trap and sewer gases from escaping.

Claim 1, reproduced below, is representative of the claims on appeal:

1. An air admittance valve having a tubular body with a valve chamber integral to one end of the tubular body, said valve chamber having a valve and an air inlet, wherein the tubular body and the valve chamber are fabricated from metal.

During prosecution, the examiner rejected the claims for obviousness based on the teachings of two prior art patents related to plumbing systems. The first patent, United States Patent No. 4,535,807 (“Ericson”), is entitled “Air Valve Device for Ducts.” Ericson discloses an air valve having a valve body connected to an air duct, a valve chamber, an air inlet, and a membrane or annular flap (or valve). Ericson teaches that the air valve is used in combination with a sanitary appliance, wherein the air valve eliminates a partial vacuum that can lead to contaminated water from the sanitary appliance being sucked therein. The second patent, United States Patent No. 6,845,527 (“Kohn”), is entitled “Valve Construction.” Kohn teaches plumbing fixtures that produce a reliable drainage system for a building. Kohn teaches that these fixtures may be fabricated in a multitude of materials, including copper, black steel and cast iron.

The Board affirmed the examiner’s obviousness rejections of Appellant’s claims covering metallic air admittance valves. In particular, the Board found that Ericson’s disclosure of air admittance valves for plumbing systems in light of Kohn’s teachings that plumbing fixtures may be constructed out of a variety of metals rendered

Appellant's invention obvious to a person of ordinary skill in the art at the time the invention was made.

On appeal, Appellant challenges the Board's ruling on the obviousness rejections of claims 1, 2, 11 and 12 based on Ericson in view of Kohn. We have jurisdiction to review the Board's ruling under 28 U.S.C. § 1295(a)(4)(A). We review the Board's ultimate determination of obviousness de novo and its underlying findings of fact for substantial evidence. In re Kotzab, 217 F.3d 1365, 1369 (Fed. Cir. 2000).

An invention is not patentable if "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 406 (2007) (citing 35 U.S.C. § 103(a)). The question of obviousness is resolved on the basis of underlying factual determinations, including (1) the scope and content of the prior art, (2) the differences between the claimed subject matter and the prior art, (3) the level of ordinary skill in the art, and (4) any secondary indicia of nonobviousness. Graham v. John Deere, 383 U.S. 1, 17-18 (1966).

The Supreme Court recently clarified the law relating to obviousness of an invention, explaining that where "a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result." KSR, 550 U.S. at 416 (citing United States v. Adams, 383 U.S. 39, 40 (1966)). "Often, it will be necessary for a court to look to interrelated teachings of multiple patents . . . and the background knowledge possessed by a person having ordinary skill in the art . . . to determine

whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” KSR, 550 U.S. at 418.

On appeal, Appellant contends that Ericson does not disclose an air admittance valve as required by claims 1 and 11. Appellant’s argument is not persuasive. The Board found that Ericson discloses an air valve having a valve body connected to an air duct, a valve chamber, an air inlet, and a membrane or annular flap (or valve). These elements are plainly disclosed in the written description of the Ericson patent. Ericson also teaches that the air valve is used in combination with a plumbing system, or “sanitary appliance.” The Board concluded that the ordinary meaning of the word “sanitary” includes “of, or relating to, or used in the disposal of sewage.” Bd. Op. at 14 (citing Merriam-Webster’s Collegiate Dictionary (10th ed. 1996)). Accordingly, the Board’s finding that Ericson discloses an air admittance valve for use in plumbing systems is supported by substantial evidence.

Appellant also argues that Kohn is non-analogous art. We disagree. The analogous art test requires that the Board show that a reference is either in the field of the applicant’s endeavor or is reasonably pertinent to the problem with which the inventor was concerned to rely on the reference as a basis for rejection. In re Kahn, 441 F.3d 977, 986-87 (Fed. Cir. 2006). In this case, Ericson and Kohn are from the same field of endeavor; both patents disclose that their inventions are used with plumbing fixtures. Accordingly, the Board’s finding that Ericson and Kohn are analogous art is supported by substantial evidence. See id.

Finally, we conclude that it would have been obvious to a person having ordinary skill in the art to combine the teachings of Ericson and Kohn to make Appellant’s

claimed invention. A simple substitution of one known element for another known element in the field to obtain predictable results is obvious. See KSR, 550 U.S. at 416. In this case, the claimed invention may be obtained merely by making Ericson's valve out of either copper, black steel or cast iron as taught by Kohn. This is simply the substitution of one known material for a generic metal to obtain predictable results. Furthermore, Appellant introduced no evidence showing unexpected results or secondary indicia of nonobviousness. Therefore, we conclude that the Board did not err in rejecting the claims for obviousness over Ericson in view of Kohn and we affirm the Board's decision.

No costs.