

NOTE: This disposition is nonprecedential.

**United States Court of Appeals  
for the Federal Circuit**

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**IN RE DWIGHT C. SHANEOUR**

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2014-1518

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Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in Serial No. 11/764,995.

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Decided: January 8, 2015

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THOMAS N. YOUNG, Young Basile Hanlon & MacFarlane P.C., of Troy, Michigan, for appellant.

NATHAN K. KELLEY, Solicitor, United States Patent and Trademark Office, of Alexandria, Virginia, for appellee. With him on the brief were MONICA B. LATEEF and MICHAEL S. FORMAN, Associate Solicitors.

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Before PROST, *Chief Judge*, O'MALLEY, and TARANTO,  
*Circuit Judges.*

PER CURIAM.

The Patent Trial and Appeal Board of the United States Patent and Trademark Office rejected Dwight Shaneour's application for a patent—U.S. Patent Applica-

tion No. 11/764,995 entitled “Remote Controlled Athletic Field Lighting System.” The application describes and claims a system of high-intensity light fixtures—as might be used to light a sports stadium—with each fixture associated with its own sensor that detects the light level, thereby allowing intensity adjustments at each fixture in order to achieve “substantially uniform light outputs.” J.A. 229. The patent examiner rejected all of Mr. Shaneour’s claims as obvious over U.S. Patent No. 7,635,958 (Miki) in light of U.S. Patent No. 6,960,892 (Loughrey), and the Board affirmed. *Ex Parte Dwight C. Shaneour*, No. 2011-013548, 2014 WL 651397 (P.T.A.B. Feb. 18, 2014).

Mr. Shaneour appeals under 35 U.S.C. § 141. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A). We affirm.

#### BACKGROUND

The ’995 application describes a lighting system that automatically corrects variations in light intensity levels between individual fixtures. J.A. 35. Claim 1 is representative of all claims on appeal. It reads:

1. A multiple fixture lighting system for an activity area such as an athletic field comprising:

at least one lighting fixture array disposed proximate the area to direct light onto the area;

said array comprising a plurality of fixtures containing high-intensity, electronically switchable ballasted lamps and being mounted on a support;

said array further comprising a plurality of multi-level output controls for said array wherein each output control is connected to at least one individual fixture and is capable of providing mul-

tiple operating output levels in relatively small output increments;

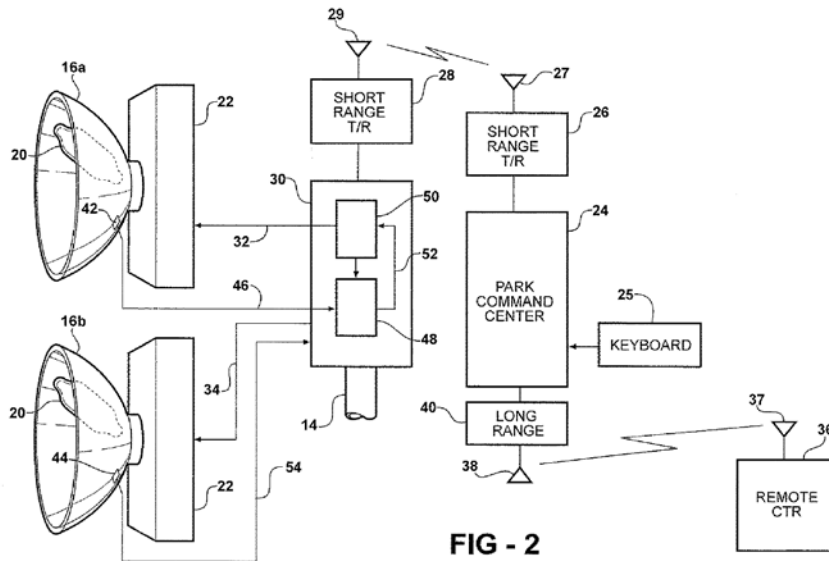
said array further comprising a plurality of light level sensors equal in number to the number of fixtures in the array wherein each sensor is associated with an individual fixture and capable of producing a signal related to the light level being produced at any given time by the lamp in said fixture;

a command center located proximate the area for selectively activating all of the fixtures in the array at selected nominal output levels within an available range of relatively large intensity increments; and

a logic system associated with the array and connected to receive individual fixture light output signals from said sensors and operative to adjust individual output controls in relatively small output increments between said nominal incremental levels as necessary to achieve substantially uniform light outputs from all of the fixtures in the array.

J.A. 229. Claims 7 and 9 further specify the use of ballasted arc lamps in the lighting system. J.A. 230–31.

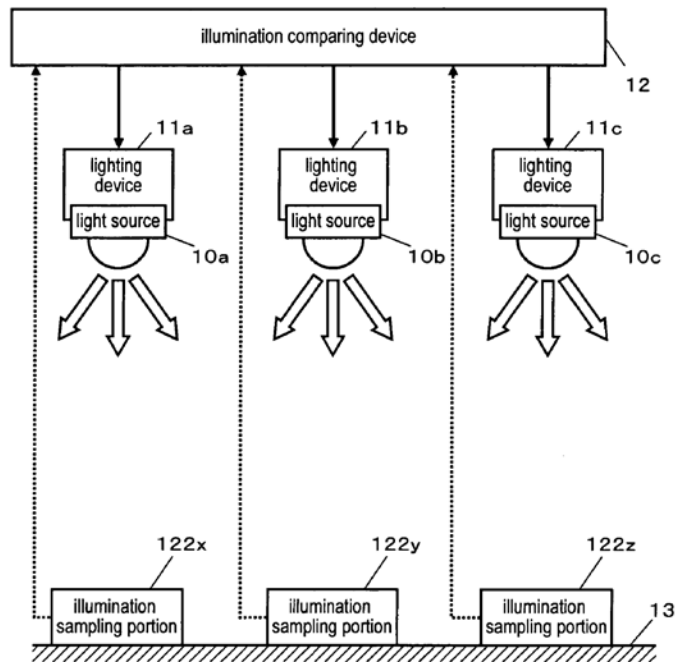
Figure 2 illustrates one embodiment of Mr. Shaneour's invention:



J.A. 74. It discloses a system of light fixtures attached to electronic ballasts (22) that function as dimmers. J.A. 38. Light intensity sensors (42, 44) measure the actual light intensity output of the fixtures and send the performance data to a logic box (30). J.A. 38-39. If the system detects a variation between the actual light output and a pre-set intensity level, the system directs the ballast to adjust the fixture's output to achieve the desired level. J.A. 39-40.

The Board relied on two prior-art references in affirming the examiner's rejection for obviousness. The primary reference, Miki, claims a lighting system that, using light sensors that transmit light-output information to a command center, automatically corrects for variations in light intensities by comparing the actual light intensity against a pre-set target intensity. J.A. 362, col. 27, lines 50–52; J.A. 366, col. 35, lines 19–31. Miki's Figure 7 illustrates a partial embodiment that discloses a one-to-one ratio of fixtures and light sensors:

FIG. 7



J.A. 344. Each light fixture is associated with a given light sensor, *i.e.*, "illumination sampling portion" (122x, 122y, 122z), that transmits information gathered by the sensor to the "illumination comparing device" (12). J.A. 360, col. 24, lines 24–38.

Because Miki does not teach using ballasted arc lamps in its lighting system, the Board also relied on Loughrey, which discloses dimmable, networkable light fixtures whose light intensity may be individually manipulated or controlled. J.A. 321; J.A. 330, col. 1, lines 6–12. Loughrey teaches the use of ballasts (either remote or connected) to perform the dimming function, J.A. 335, col. 12, lines 13–17, and discusses arc lamps as one potential light source, J.A. 331, col. 3, lines 48–52.

#### DISCUSSION

Whether a claim is invalid under 35 U.S.C § 103 for obviousness is a question of law based on underlying findings of fact. *In re Gartside*, 203 F.3d 1305, 1316 (Fed. Cir. 2000). Factual inquiries relevant to this appeal include the scope and content of the prior art, differences between the prior art and the claim at issue, and whether the prior art is in the inventor’s field or pertinent to the problem the inventor was addressing. *See In re Kubin*, 561 F.3d 1351, 1355 (Fed. Cir. 2009); *In re Bigio*, 381 F.3d 1320, 1324 (Fed. Cir. 2004). We review the Board’s factual findings for substantial evidence, *Gartside*, 203 F.3d at 1316, and its conclusion of obviousness, based on those facts, de novo, *In re Sullivan*, 498 F.3d 1345, 1350 (Fed. Cir. 2007).

Mr. Shaneour first challenges the Board’s determination that Miki is pertinent prior art. The obviousness determination requires indulging the assumption that a skilled artisan had knowledge of all prior art in the “field of endeavor” relevant to the claim. *In re Antle*, 444 F.2d 1168, 1171–72 (CCPA 1971). Where prior art falls outside that field, it should still be considered if it is “reasonably pertinent to the particular problem with which the inventor was involved.” *In re Wood*, 599 F.2d 1032, 1036 (CCPA 1979); *Bigio*, 381 F.3d at 1325. Here, substantial evidence supports the Board’s consideration of Miki.

It is enough that the Miki reference falls within the relevant field of endeavor. Mr. Shaneour claims a “multiple fixture lighting system” that is “capable of providing multiple operating output levels.” J.A. 229. The Board did not err in classifying the invention within the field of “lighting control systems.” J.A. 5. And even if, as Mr. Shaneour urges, we were to read the preamble of claim 1 as limiting the field of endeavor to athletic fields’ lighting control systems—and we do not, *see Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999) (preamble not limiting where it merely states “the purpose or intended use of the invention”)—Miki would fall within that field. Miki describes the use of its invention “in places such as in a hall, in an ordinary room, and outdoors.” J.A. 349, col. 1, lines 55–56; *see State Contracting & Eng’g Corp. v. Condotte Am., Inc.*, 346 F.3d 1057, 1069 (Fed. Cir. 2003) (similarity in structure and function between the invention and the prior art supports a conclusion that the prior art is within the inventor’s field of endeavor).

Mr. Shaneour’s challenge to the Board’s claim construction likewise lacks merit. Seeking to distinguish his invention from Miki, Mr. Shaneour argues that the claims require each light sensor to be placed at “the point of [the light’s] origin” so as to measure *only* the “output[] of [each] individual lamp[].” Appellant’s Opening Br. at 19. But this reading departs from the “broadest reasonable construction in light of the specification as it would be interpreted by one of ordinary skill in the art”—the approach used by the Board during prosecution. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (en banc) (quotation marks and citation omitted).

The claim language describes each sensor as being “*associated with* an individual fixture” and “capable of producing a signal *related to* the light level being produced.” J.A. 229 (emphases added). The two highlighted phrases are quite reasonably read as covering sensors

that are somewhat removed from the particular lamp or fixture and that measure the level of light that is a blend of outputs from more than one lamp or fixture. And we have been shown no recitation in the patent disclosure or prosecution history that compels the narrow interpretation Mr. Shaneour advances.

Accordingly, the Board did not err in concluding that Miki—in Figure 7, *supra*, and its accompanying description—teaches a lighting system in which individual sensors, each “associated with” individual light fixtures, are capable of measuring light outputs “related to” those same fixtures. Although Miki does not disclose the use of ballasted arc lamps as a specific source of light, Loughrey does. J.A. 331, col. 3, lines 48–52. And Mr. Shaneour has not made any distinct argument that undermines the Board’s conclusion as to Loughrey or its combination with Miki. Mr. Shaneour’s challenge to the Board’s obviousness conclusion therefore fails.

#### CONCLUSION

For the foregoing reasons, the Board’s decision is affirmed.

#### AFFIRMED